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BEVERAGE INDUSTRY (ISSN 0148-6187) is published semi-monthly by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 757 Third Avenue, New York, New York 10017. Advertising offices: 757 Third Avenue, New York, New York 10017 and 111 East Wacker Drive, Chicago, Illinois 60601. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: $35 per year in the United States and Canada. All other countries: $55 per year. Single copies (prepaid only): $2 in the U.S.; elsewhere $4.50; add $3.00 for shipping and handling per order. Copyright © 1982 by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Microfilm copies of articles are available through University Microfilm, International, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

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1. **Annual**—This section contains a review of what happened in the major segments of the beverage industry during the year. It includes charts and graphs detailing size of the industries, volumes, advertising expenditures, etc. The new product section contains a review of the many new products, new packages, services and literature offered to the trade during the year. Reader service numbers for more information make it easy for beverage producers to obtain details on these items which they may have missed when they were first introduced.
2. **Manual**—In charts and graphs, this material is operational in nature and gives the bottler production and formulation details available nowhere else. A directory of industry associations, franchise companies and brand names is also offered.
3. **Buyers' Guide**—Here the reader finds the industry's most complete directory of products and services. Complete addresses with telephone numbers of major suppliers are also given.

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U.S. population demographics

1980 - 1990 Population projection by age (000)

	Total U.S.	North East	South	East Central	West Central	South West	West	Pacific
Total 1980	228,497.1	54,630.4	47,714.8	47,466.5	17,281.8	21,663.0	7,500.8	32,239.8
0 - 17	27.9%	26.4%	28.1%	28.7%	27.8%	29.5%	30.7%	27.1%
18 - 24	13.2%	12.7%	13.2%	13.3%	13.3%	13.9%	13.4%	13.7%
25 - 34	16.7%	16.2%	16.2%	16.5%	16.2%	17.1%	18.7%	18.4%
Total 1985	232,371.3	57,540.8	47,996.5	48,856 .1	17,493.4	21,087.7	7,240.6	32,156.2
5 - 14	14.2%	13.4%	14.4%	14.6%	13.8%	15.2%	15.3%	13.7%
15 - 24	16.5%	16.2%	16.5%	16.4%	16.6%	16.6%	16.7%	16.8%
25 - 34	17.0%	16.9%	16.7%	17.4%	17.2%	16.2%	18.1%	17.4%
Total 1990	243,004.6	59,272.9	50,789.7	50,511 .4	18,016.4	22,508.9	7,721.6	34,184.1
5 - 14	14.4%	14.2%	13.2%	15.3%	15.0%	15.6%	15.6%	14.4%
15 - 24	14.3%	13.7%	14.4%	14.7%	13.9%	14.7%	15.6%	14.4%
25 - 34	16.7%	16.9%	16.4%	17.3%	16.7%	15.2%	16.9%	17.3%

Source: Census Data Population Estimates - Series II-A
Beverage Marketing Corp ; Beverage Data Bank

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September 15, 1982

Population projections 1985-1990

	Total U.S.	North East	South	East Central	West Central	South West	West	Pacific
Total 1985	232,371.3	57,540.8	47,996.5	48,856.1	17,493.4	21,087.7	7,240.6	32,156.
5 - 14	32,826.2	7,674.0	6,891.6	7,105.5	2,432.8	3,214.1	1,104.4	4,402.
15 - 24	38,224.0	9,323.4	7,876.6	8,056.2	2,862.6	3,505.8	1,245.2	5,354.
25 - 34	39,476.7	9,663.6	7,985.5	8,501.9	2,994.1	3,420.0	1,273.4	5,638.
Total 1990	243,004.6	59,272.9	50,789.7	50,511.4	18,016.0	22,508.9	7,721.6	34,184.
5 - 14	35,090.1	8,394.4	6,702.6	7,702.9	2,656.4	3,507.2	1,211.2	4,915.
15 - 24	34,717.5	8,112.8	7,312.6	7,429.2	2,482.3	3,318.3	1,167.7	4,894.
25 - 34	40,560.3	9,935.6	8,287.3	8,653.2	3,044.2	3,396.7	1,327.0	5,916.

Source: Census Data Population Estimates - Series II-A
Beverage Marketing Corp ; Beverage Data Bank

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September 15, 1982

cups. If this market ploy works, Maxwell thinks it will add to the growth of the industry.

Beer consumption per capita rose from 21.3 gallons in 1980 to 21.6 gallons last year, according to Maxwell. Marketing efforts by breweries continue to aim at men aged 18 to 49. Even though more women are drinking the light beers, brewers are so far unwilling to spend much money to appeal directly to women. The breweries reportedly fear having any of their brands labeled "a woman's drink."

The same upscale, moderate lifestyle referred to by Robert Brown at the Wine Institute, is said to be a major factor behind increased consumption of imported beer brands. Many sources expect a substantial growth in sales of imported beer brands during this decade.

Bottled water consumption also rose 1980 to '81; from 1.6 to 1.9 gallons per capita. Bottled water intake has steadily increased since 1976, according to Maxwell's figures.

Juices, almost entirely represented by orange and grapefruit juice, maintained a steady 6.9 gallons per capita consumption level last year. Juices took a strong jump in 1975 over '74, but dropped off slightly in '78 and '79. According to the Florida Department of Citrus, 899 million single-strength gallons of orange and grapefruit juice were sold at retail outlets in 1981, down from the 905 million gallon level in 1980. However, total retail sales of orange and grapefruit juice rose 13%, '81 over '80, from $2.4 to $2.7 billion.

Other liquid consumption trends show distilled spirits and powdered drinks leveling off at 2.0 and 6.0 gallons per capita, respectively, in 1981. Tea and milk consumption continued to decline, at 6.5 and 20.6 gallons per capita, respectively.

Estimated tea sales trends

(Million pounds)

	1978		1979		1980		1981	
	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.
Iced Tea	106.18	68.5%	105.26	68.4%	106.16	68.1%	105.06	67.3%
Hot Tea	48.82	31.5	48.74	31.6	49.84	31.9	50.94	32.7
Total	155.00	100.0%	154.00	100.0%	156.00	100.0%	156.00	100.0%

Source: USDA; DSI; USBA; American Bottled Water Assn.; Lehman Brothers Kuhn Loeb Research estimates

Copyright: John Maxwell, Beverage Industry, May 7, 1982

Estimated wine consumption

(Gallons per capita)

	1977	1978	1979	1980	Change	1981	Change
Domestic	1.510	1.726	1.742	1.806	3.7%	1.869	3.5%
Imported	0.313	0.421	0.408	0.449	10.0	0.498	10.9
Total	1.823	2.147	2.150	2.255	4.9%	2.367	5.0%

Source: USDA; DSI; USBA; American Bottled Water Assn.; Lehman Brothers Kuhn Loeb Research estimates

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Liquid consumption trends in the United States

(Gallons per capita per year)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981E
Soft Drinks	28.6	30.1	31.5	31.4	31.0	33.7	35.9	37.1	38.1	38.8	39.5
Coffee*	35.3	35.2	35.1	33.8	33.0	29.4	28.0	27.0	27.7	27.0	26.0
Beer	19.2	19.7	20.5	21.3	21.6	21.8	22.5	23.1	23.8	24.3	24.6
Milk	23.0	23.1	22.7	22.0	22.3	22.1	21.9	21.6	21.4	20.9	20.6
Juices	5.7	6.1	6.1	6.2	6.9	6.9	6.9	6.6	6.7	6.9	6.9
Tea	5.8	5.9	6.3	6.2	6.2	6.4	6.9	6.7	6.6	6.6	6.5
Powdered Drinks	NA	NA	NA	NA	4.8	5.5	5.9	6.1	6.0	6.0	6.0
Wine	1.5	1.6	1.7	1.7	1.7	1.7	1.8	2.1	2.2	2.3	2.4
Distilled Spirits	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Bottled Water	1.1	NA	NA	NA	1.2	1.2	1.3	1.4	1.5	1.6	1.9
Subtotal	122.1	123.6	125.8	124.6	130.7	130.7	133.1	133.7	136.0	136.4	136.4
Imputed Water Consumption†	60.4	58.9	57.6	57.9	51.8	51.8	49.4	48.8	46.5	46.1	46.1
Total	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5

*Coffee data is based on a three-year moving average to counterbalance inventory swings, thereby portraying consumption more realistically. †Includes all others
R = Revised
NA = Not available

Source: USDA; DSI; USBA; American Bottled Water Association; Lehman Brothers Kuhn Loeb Research estimates

Copyright: John Maxwell, Beverage Industry, May 7, 1982

Consumption of soft drinks by company

1976 Mil. Cases	1976 Pct. Market	1977 Mil. Cases	1977 Pct. Market	1978 Mil. Cases	1978 Pct. Market	1979 Mil. Cases	1979 Pct. Market	1980 Mil. Cases	1980 Pct. Market		1981 Mil. Cases	1981 Pct. Market	1980-81 Change
										Coca-Cola Company			
1,190.0	24.3%	1,290.0	24.5%	1,335.0	24.3%	1,365.0	23.9%	1,425.0	24.3%	Coca-Cola	1,463.0	24.2%	2.7%
130.0	2.7	150.0	2.8	158.0	2.9	165.0	2.9	171.0	2.9	Sprite	178.0	2.9	4.1
125.0	2.6	137.0	2.6	149.0	2.7	170.0	3.0	188.0	3.2	Tab	216.0	3.6	14.9
112.0	2.3	119.0	2.3	112.0	2.0	107.0	1.9	98.0	1.7	Fanta	88.0	1.5	(10.2)
37.0	0.7	45.0	0.9	46.0	0.8	43.0	0.8	39.0	0.7	Mr. Pibb	34.0	0.6	(12.8)
31.0	0.6	28.0	0.5	27.0	0.5	25.0	0.4	26.0	0.4	Fresca	24.0	0.4	(7.7)
—	—	—	—	—	—	38.0	0.7	50.0	0.8	Mello Yello	53.0	0.9	6.0
10.0	0.2	15.0	0.3	19.0	0.4	23.0	0.4	25.0	0.4	Others	26.0	0.4	4.0
1,635.0	**33.4**	**1,784.0**	**33.9**	**1,846.0**	**33.6**	**1,936.0**	**34.0**	**2,022.0**	**34.4**	**Total**	**2,082.0**	**34.5**	**3.0**
										PepsiCo, Inc.			
830.0	17.0	903.0	17.2	969.0	17.6	1,022.0	17.9	1,056.0	17.9	Pepsi-Cola	1,104.0	18.3	4.5
73.0	1.5	100.0	1.9	130.0	2.4	156.0	2.8	169.0	2.9	Mountain Dew	179.0	3.0	5.9
90.0	1.9	109.0	2.1	127.0	2.3	142.0	2.5	154.0	2.6	Diet Pepsi	173.0	2.9	12.3
25.0	0.5	27.0	0.5	22.0	0.4	24.0	0.4	24.0	0.4	Pepsi Light	29.0	0.5	20.8
12.1	0.2	12.6	0.2	14.0	0.3	15.0	0.3	15.0	0.3	Teem	14.0	0.2	(6.7)
15.3	0.3	20.3	0.4	19.0	0.3	18.0	0.3	17.0	0.3	Others	16.0	0.2	(5.9)
1,045.4	21.4	1,171.9	22.3	1,281.0	23.3	1,377.0	24.2	1,435.0	24.4	Total	1,515.0	25.1	5.6
										Dr Pepper Co.			
243.0	5.0	278.0	5.3	299.5	5.4	311.5	5.5	323.0	5.5	Dr Pepper	326.0	5.4	0.9
39.0	0.8	52.0	1.0	60.5	1.1	62.9	1.1	69.1	1.2	Sugar Free Dr Pepper	79.5	1.3	15.1
282.0	**5.8**	**330.0**	**6.3**	**360.0**	**6.5**	**374.4**	**6.6**	**392.1**	**6.7**	**Total**	**405.5**	**6.7**	**3.4**
										Canada Dry Corp.			
52.4	1.1%	52.7	1.0	55.0	1.0	56.7	0.9	60.2	1.0	Ginger ale	63.2	1.1	5.0
25.2	0.5	25.2	0.5	25.0	0.5	26.5	0.5	26.8	0.4	Tonic, Bitter Lemon	28.0	0.5	4.5
19.0	0.4	19.0	0.4	18.0	0.3	20.7	0.4	27.0	0.5	Club Soda	33.0	0.5	22.2
—	—	15.0	0.3	15.0	0.3	15.5	0.3	15.3	0.3	Barrelhead	14.3	0.2	(6.5)
5.5	0.1	5.5	0.1	5.5	0.1	5.0	0.1	4.0	0.1	Wink	4.2	0.1	5.0
45.0	0.9	42.5	0.8	40.0	0.7	38.0	0.7	31.0	0.5	Others	25.0	0.4	(19.4)
147.1	**3.0**	**159.9**	**3.1**	**158.5**	**2.9**	**162.4**	**2.9**	**164.3**	**2.8**	**Total**	**167.7**	**2.8**	**2.1**
67.0	1.4	65.0	1.2	60.0	1.1	57.0	1.0	54.5	0.9	**Cott Corp.**	44.0	0.7	(19.3)
9.0	0.2	18.0	0.3	31.0	0.6	31.0	0.5	30.0	0.5	**Welch's**	31.6	0.5	5.3
23.8	0.5	22.4	0.4	22.4	0.4	22.4	0.4	21.0	0.4	**No-Cal**	20.0	0.3	(4.8)
528.9	**10.9**	**595.3**	**11.3**	**631.9**	**11.5**	**647.2**	**11.4**	**661.9**	**11.3**	**Grand Total[1]**	**668.8**	**11.0**	**1.0**
[1]Total for Dr Pepper and Dr Pepper-owned companies.													
										Seven-Up Company			
305.8	6.3	315.0	6.0	322.0	5.9	320.0	5.6	317.0	5.4	7-Up	301.0	5.0	(5.0)
60.0	1.2	62.3	1.2	63.0	1.1	63.6	1.1	64.0	1.1	Diet 7-Up	70.0	1.2	9.4
10.0	0.2	10.5	0.2	10.2	0.2	10.0	0.2	9.0	0.2	Dixie Cola	8.0	0.1	(11.1)
1.3	—	1.2	—	1.0	—	1.0	—	1.0	—	Howdy Flavors	1.0	—	—
377.1	7.7	389.0	7.4	396.2	7.2	394.6	6.9	391.0	6.7	Total	380.0	6.3	(2.8)
										Royal Crown Companies			
162.2	3.3%	168.0	3.2%	164.0	3.0%	159.0	2.8%	163.0	2.8%	Royal Crown	154.0	2.5%	(1.1%)
—	—	—	—	—	—	—	—	3.5	0.1	RC 100	15.0	0.2	330
40.6	0.8	40.6	0.8	40.2	0.7	38.0	0.7	37.0	0.6	Diet Rite Cola	37.0	0.6	—
55.6	1.2	53.0	1.0	53.5	1.0	53.0	0.9	50.0	0.8	Nehi and Others	43.0	0.7	(14.0)
258.4	**5.3**	**261.6**	**5.0**	**257.7**	**4.7**	**250.0**	**4.4**	**253.5**	**4.3**	**Total**	**249.0**	**4.1**	**(1.8)**
										Crush International			
136.4	2.8	50.7	2.9	169.6	3.1	180.0	3.4	186.3	3.2	Hires, Crush, etc.	193.6	3.2	3.9
19.5	0.4	23.0	0.4	24.0	0.4	25.0	0.5	25.9	0.4	Sun Drop	26.4	0.4	1.9
155.9	3.2	173.7	3.3	193.6	3.5	205.0	3.6	212.2	3.6	Total	220.0	3.6	3.7
										Moxie Incorporated Monarch Company			
21.8	0.4	21.9	0.4	23.2	0.4	19.0	0.3	18.0	0.3	Nesbitts	17.0	0.3	(5.6)
NA	—	NA	—	NA	—	15.0	0.3	16.0	0.3	Frostie Root Beer*	17.0	0.3	6.3
12.8	0.3	13.8	0.3	15.1	0.3	14.3	0.2	14.4	0.2	NuGrape	14.4	0.2	—
7.2	0.2	8.3	0.2	9.3	0.2	8.9	0.2	8.5	0.2	Sun Crest	8.4	0.1	(1.2)
1.8	—	2.0	—	2.2	—	2.2	—	2.2	—	Moxie	2.2	—	—
NA	—	0.6	—	1.0	—	0.7	—	NA	—	Kickapoo	NA	—	—
4.0	0.1	4.2	0.1	4.3	0.1	3.9	0.1	3.5	0.1	Mason's Root Beer	3.0	0.1	(14.3)
2.0	—	2.2	—	2.5	—	2.1	—	1.9	—	Flavette	0.7	—	(63.2)
0.7	—	0.8	—	2.4	—	2.0	—	1.8	—	Dr. Wells	1.3	—	(27.8)
22.6	0.5	24.6	0.5	26.9	0.5	31.9	0.6	33.0	0.6	Other	34.0	0.6	3.0
72.9	**1.5**	**78.4**	**1.5**	**86.9**	**1.5**	**100.0**	**1.7**	**99.3**	**1.7**	**Total**	**98.0**	**1.6**	**(1.3)**

*Acquired December 31, 1979.

Source: Lehman Brothers Kuhn Loeb Research
Case: 24 pack, 8 oz. containers

Copyright: John C. Maxwell and Beverage Industry
April 9, 1982

Consumption of soft drinks by company

1976 Mil. Cases	1976 Pct. Market	1977 Mil. Cases	1977 Pct. Market	1978 Mil. Cases	1978 Pct. Market	1979 Mil. Cases	1979 Pct. Market	1980 Mil. Cases	1980 Pct. Market		1981 Mil. Cases	1981 Pct. Market	1980-81 Change
										Consolidated Chocolate Co.			
—	—	2.1	—	2.4	—	2.6	0.1	2.7	0.1	Chocolate Soldier	2.8	0.1	3.7
—	—	1.0	—	1.3	—	1.4	—	1.4	—	Brownie	1.4	—	—
—	—	1.3	—	1.8	—	1.9	—	2.0	—	Choc-ola	2.0	—	—
—	—	4.0	0.1	4.5	0.1	4.7	0.1	4.9	0.1	Other	5.0	0.1	2.0
6.7	**0.1**	**8.4**	**0.1**	**10.0**	**0.2**	**10.6**	**0.2**	**11.0**	**0.2**	**Total**	**11.2**	**0.2**	**1.8**
79.6	**1.6**	**96.8**	**1.6**	**96.9**	**1.7**	**110.6**	**1.9**	**110.3**	**1.9**	**Grand Total²**	**109.2**	**1.8**	**(1.0)**
95.0	1.9	103.1	2.0	106.5	1.9	100.0	1.7	105.0	1.8	**Shasta Beverages#**	109.0	1.8	3.8
NA	—	NA	—	NA	—	NA	—	70.0	1.2	**Sunkist**	82.0	1.4	17.1
										Cadbury Schweppes			
28.4	0.6	35.5	0.7	43.0	0.8	55.8	1.0	64.8	1.1	**USA, Inc.**	72.0	1.2	11.1
29.5	0.6	40.0	0.8	46.2	0.8	54.0	0.9	58.0	1.0	**A & W Beverages¢**	61.0	1.0	5.2
										Dad's Root Beer Company			
32.0	0.6	33.0	0.6	34.0	0.6	33.5	0.6	34.1	0.6	Dad's Root Beer	34.0	0.6	(0.3)
15.0	0.3	15.0	0.3	17.0	0.3	16.0	0.3	15.6	0.3	Bubble Up	18.5	0.3	18.6
7.2	0.2	7.2	0.1	7.0	0.1	6.5	0.1	6.7	0.1	Diet Dad's	6.8	0.1	1.5
54.2	**1.1**	**55.2**	**1.0**	**58.0**	**1.0**	**55.5**	**1.0**	**56.4**	**1.0**	**Total**	**59.3**	**1.0**	**5.1**
36.4	0.7	37.0	0.7%	40.0	0.7%	47.6	0.8%	53.8	0.9%	**Squirt Company**	64.0	1.1	19.0%
31.3	0.6	33.5	0.6	35.8	0.7	39.1	0.7	39.9	0.7	**Double Cola Co.**	39.0	0.6	(2.3)
27.9	0.6	28.4	0.5	29.0	0.6	29.0	0.5	29.5	0.5	**Frank's Beverages**	29.5	0.5	—
22.3	0.4	22.3	0.5	26.1	0.5	23.9	0.4	22.1	0.4	**Faygo**	25.2	0.4	14.0
NA	—	NA	—	7.9	0.1	11.6	0.2	13.9	0.2	**Barq's**	16.9	0.3	21.6
7.9	0.2	8.3	0.2	9.3	0.2	9.9	0.2	10.2	0.2	**Big K (Kroger)**	11.0	0.2	11.4
12.8	0.3	12.5	0.2	12.5	0.2	12.5	0.2	12.8	0.2	**Cragmont (Safeway)**	13.5	0.2	5.5
12.8	0.2	13.3	0.2	12.0	0.2	11.0	0.2	10.5	0.2	**Chek (Winn-Dixie)**	11.0	0.2	4.8
7.2	0.1	8.2	0.2	8.5	0.2	8.0	0.1	8.0	0.1	**Cotton Club**	7.2	0.1	(6.3)
NA	—	NA	—	NA	—	2.6	0.1	2.9	—	**Yukon (A&P)**	3.1	0.1	6.9
4,433.2	**90.8**	**4,864.6**	**92.7**	**5,138.1**	**93.4**	**5,380.9**	**94.4**	**5,651.0**	**96.2**	**Total**	**5,827.7**	**96.5**	**3.1**
456.8	9.2	394.4	7.4	361.9	6.6	319.1	5.6	224.0	3.8	Others	207.3	3.5	(7.5)
4,890.0	**100.0%**	**5,259.0**	**100.0%**	**5,500.0**	**100.0%**	**5,700.0**	**100.0%**	**5,875.0**	**100.0%**	**Grand Total**	**6,035.0**	**100.0%**	**2.7%**

#Division of Consolidated Foods Corp. ¢Subsidiary of United Brands Company ²Total for Moxie-owned companies

Source: Lehman Brothers Kuhn Loeb Research
Case: 24 pack, 8 oz. containers

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April 9, 1982

Estimated market share by type*

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980		1981
63.0%	63.0%	63.0%	62.5%	61.7%	62.1%	62.2%	62.4%	62.3%	62.3%	62.4%	Cola	62.6%
12.0	12.0	12.0	12.5	12.8	12.9	12.7	12.4	12.3	12.1	11.8	Lemon-Lime	11.6
3.9	3.9	4.6	5.0	5.2	5.3	6.7	7.3	7.7	7.9	8.0	Pepper Type	8.0
8.3	8.4	8.4	8.2	8.0	7.9	7.8	7.4	7.4	7.3	7.4	Orange	7.4
4.5	5.0	5.0	5.0	5.2	5.2	5.2	5.3	5.4	5.5	5.5	Root Beer	5.5
8.4	7.7	7.0	6.8	7.1	6.6	5.4	5.2	4.9	4.9	4.9	All Others	4.9
100.0%	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**Total**	**100.0%**

*Includes diet drinks.

Cola consumption*

1978 Mil. Cases	1978 Pct. Total	1978 Pct. Change	1979 Mil. Cases	1979 Pct. Total	1979 Pct. Change	1980 Mil. Cases	1980 Pct. Total	1980 Pct. Change	Company	1981 Mil. Cases	1981 Pct. Total	1981 Pct. Change
1,484.0	43.3	4.0	1,535.0	43.2	3.4	1,613.0	44.0	5.1	Coca-Cola	1,679.0	44.4	4.1
1,118.0	32.6	7.6	1,188.0	33.5	6.3	1,234.0	33.6	3.9	PepsiCo	1,306.0	34.6	5.8
204.2	6.0	(2.1)	197.0	5.5	(3.5)	203.5	5.5	3.3	Royal Crown	206.0	5.4	1.2
2,806.2	81.9	4.9	2,920.0	82.2	4.1	3,050.5	83.1	4.5	Subtotal	3,191.0	84.4	4.6
620.8	18.1	2.5	631.0	17.8	1.6	619.5	16.9	(1.8)	All Others	589.0	15.6	(4.9)
3,427.0	**100.0**	**.5**	**3,551.0**	**100.0**	**3.6**	**3,670.0**	**100.0**	**3.4**	**Total**	**3,780.0**	**100.0**	**3.0**

*Includes diet colas.

Source: Lehman Brothers Kuhn Loeb Research
Case: 24 pack, 8 oz. containers

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April 9, 1982

or 4.2 billion cases. All of the accompanying figures reflect 8 oz. 24 per case equivalent sizes.

Based on the industry's 2.7% unit volume growth last year, Maxwell contends that the general economy is not as important to the soft drink industry as it once was. Per capita consumption took a good jump last year to 39.5 gallons. It should be noted that the Census Bureau has revised total resident population numbers; accordingly, Maxwell has adjusted per capita numbers for prior years.

Maxwell expects soft drink volume this year should be at least as good as 1981. He looks for a growth rate of between 2.5% and 3.5% on a longer-term basis. Coca-Cola USA officials have said they expect industry volume to grow at 3.8% annually through the '80s.

With the substantial base that the soft drink industry enjoys, Maxwell says, absolute volume gains continue to be extraordinary despite lower year-to-year percentage gains. For example, total volume was up 3.8%, '80 over '79; 5.6%, '79 over '78 and 6.6%, '78 over '77. This trend holds true at least since 1970.

In 1981, the big winners were the colas, dietary products and private labels. The principle losers were in the lemon-lime area.

Sales of all colas, including diets, rose 3.0% in '81 compared with '80, to 3.8 billion cases. This was 62.6% of the total market. The lemon-limes were off 1.6%, or 5 million cases, to 700 million. Sprite was the only large-selling lemon-lime that managed an increase: up 4.1%.

In the private labels, Kroger's Big K sold 11 million cases last year, 11.4% better than '80; Safeway's Cragmont brand, which sold 13.5 million cases, was up 5.5%; Winn-Dixie's Chek sold 11 million cases, up 4.8%; and A&P Yukon sold 3.1 million cases, up 6.9%.

The really big gainers, however, were the diets. Industry experts believe that the trend toward higher sales of diet soft drinks will continue as that huge group of consumers aged 25-40 maintains its weight-conscious attitude.

Diet drinks accounted for almost 14% of all soft drinks consumed last year; 832 million cases were sold in 1981, 10.9% more than the year before. According to Maxwell's figures, since 1975, diet sales have increased an average of 12.6% year-to-year.

Coca-Cola products, including Tab and Fresca, sold 240 million cases in '81, 28.8% of the total market and 12.1% above '80. Pepsi-Cola

Top ten drinks

1979 Mil. Cases	1979 Pct. Market	1979 Pct. Change	1980 Mil. Cases	1980 Pct. Market	1980 Pct. Change		1981 Mil. Cases	1981 Pct. Market	1981 Pct. Change
1,365.0	23.9	2.2	1,425.0	24.3	4.4	Coca-Cola	1,463.0	24.2	2.7
1,022.0	17.9	5.5	1,056.0	18.0	3.3	Pepsi-Cola	1,104.0	18.3	4.5
311.5	5.5	4.0	323.0	5.5	3.7	Dr Pepper	326.0	5.4	0.9
320.0	5.6	(0.6)	317.0	5.4	(0.9)	Seven-Up	301.0	5.0	(5.0)
170.0	3.0	14.1	188.0	3.2	10.6	Tab	216.0	3.6	14.9
156.0	2.7	20.0	169.0	2.9	8.3	Mountain Dew	179.0	2.9	5.9
165.0	2.9	4.4	171.0	2.9	3.6	Sprite	178.0	2.9	4.1
142.0	2.5	11.8	154 0	2.6	8.5	Diet Pepsi	173.0	2.9	12.3
159.0	2.8	(3.0)	163.0	2.8	3.7	Royal Crown Cola	154.0	2.7	(1.1)
NA	—	—	70.0	1.2	—	Sunkist	82.0	1.4	17.1
3,810.5	66.8	4.3	4,039.0	68.9	6.0	Total	4,176.0	69.3	3.4

Source: Lehman Brothers Kuhn Loeb Research
Case: 24 pack, 8 oz. containers

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Lemon-lime consumption*

1979 Mil. Cases	1979 Pct. Total	1979 Pct. Change	1980 Mil. Cases	1980 Pct. Total	1980 Pct. Change	Company	1981 Mil. Cases	1981 Pct. Total	1981 Pct. Change
383.6	55.6	(0.4)	381.0	54.0	(0.7)	Seven-Up	371.0	53.0	(2.6)
165.0	23.9	4.4	171.0	24.3	3.6	Coca-Cola	178.0	25.4	4.1
15.0	2.2	7.1	15.0	2.1	—	PepsiCo	14.0	2.0	(6.7)
536.6	81.7	1.2	567.0	80.4	0.6	Subtotal	563.0	80.4	(0.7)
126.4	18.3	5.3	138.0	19.6	9.2	All Others	137.0	19.6	(5.1)
690.0	100.0	1.9	705.0	100.0	2.2	Total	700.0	100.0	(1.6)

*Does not include Hill Billy drinks or Fresca
Source: Lehman Brothers Kuhn Loeb Research
Case: 24 pack, 8 oz. containers

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April 9, 1982

Concentrate prices of U.S. franchisors*

Product	Per unit price	12-oz. case yield	Lbs. per case sugar	Per 12-oz. case concentrate
Pepsi-Cola	$1084	2400	2.069	$ .452
Diet Pepsi	2330	2400		.971
Mtn. Dew	233	400	2.305	.583
Coca-Cola (Amend)	2.918	2.889		syrup
Coca-Cola (Non) -	2.515			syrup
Tab	275.50	288.9		.954
Sprite	139.91	234.9	1.971	.596
S.F. Sprite	223.32	233.3		.957
Fresca	230.98	235.4		.981
Mello Yello	144.26	234	2.397	.616
Mr. Pibb	127.84	221.9	2.003	.576
S.F. Mr. Pibb	216.96	221.8		.978
Seven-Up	225	416.7	1.920	.540
S.F. Seven-Up	325	370		.878
Royal Crown	44	96	2.083	.458
Diet Rite/RC 100	82.50	96		.859
RC/DC	50	96	2.083	.521
Nehi Orange	33	96	2.47	.344
Sunkist	530	1000	2.433	.530
S.F. Sunkist	174	180		.966
Orange Crush	62.37	134.2	2.254	.465
Hires	42.15	97.5	1.969	.432
Squirt	74	115.2	1.870	.642
Diet Squirt	77.30	115.2		.671
A & W Root Beer	440	682.4	2.2	.645
S.F. A & W Root Beer	552	512		1.078
Barq's	68.35	131.4	2.390	.520
S.F. Barq's	103.75	109.3		.949
Triple XXX Root Beer	197.50	456	2.155	.433
S.F. Triple XXX	251.25	410.5		.612
Dad's Root Beer	235	399	2.005	.589
S.F. Dad's Root Beer	290	289		1.003
Bubble-Up	190	332	1.883	.572
S.F. Bubble-Up	225	256		.996
Schweppes Ginger Ale	370	688	1.672	.538
S.F. Ginger Ale	550	800		.688

Product	Per unit price	12-oz. case yield	Lbs. per case sugar	Per 12-oz. case concentrate
Club Soda	381	600		.635
Tonic Water	1240	800	1.650	1.550
White Light-nin	49.50	180	2.48	.275
Diet White Light-nin	92.00	170.70		.539
London Dry Club Soda	41.20	373		.1105
London Dry Ginger Ale	34.85	173	1.66	.2011
London Dry Quinine Water	59.05	174.70	1.78	.3381
Double Cola	750	1466.7	1.97	.5114
Diet Double Cola	705	814.1		.8660
Ski	660	1110.7	2.34	.5942
Moxie	63	102	1.960	.618
Diet Moxie	44	58		.759
Frostie	96	188	2.127	.511
S.F. Frostie	100	104		.962
Nesbitt's Orange	60	146	2.534	.411
S.F. Nesbitt's Orange	164.20	219		.750
Mason's Root Beer	66	172	2.325	.384
S.F. Mason's Root Beer	90	170		.529
NuGrape	124	266	2.631	.466
Grapette	58	122	2.459	.475
Dr. Wells	69	152	1.973	.454
S.F. Dr. Wells	90	149		.604
Kickapoo	68	170	2.353	.400
Dr Pepper	361.85	618	1.890	.532
S.F. Dr Pepper	593.46	618		.874
CD Ginger Ale	156	311	1.614	.502
CD Club Soda	132	249		.530
Tonic Water	280	237	1.669	1.181
CD Wink	85	207.31	2.16	.410
Barrelhead	100	236.93	2.08	.422

*As of August 6, 1982

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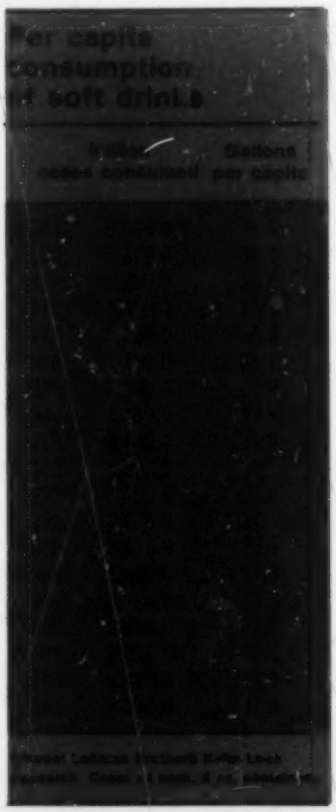
September 15, 1982

brands, including Diet Pepsi and Pepsi Light, sold 202 million cases last year, 24.3% of the market and 13.5% better than '80. Sugar Free Dr Pepper sales rose 15.1% in '81 over '80.

Maxwell says that as the population ages and becomes more concerned about waistlines, he expects the dietary area may well become the prime growth field for the foreseeable future.



Another growth area appears to be noncaffeinated soft drinks. The principal new soft drink product that could foreshadow a new area of interest is caffeine-free RC 100, says Maxwell. This brand sold somewhere between 10 and 15 million cases in 1981; Royal Crown Cola won't be specific. **BI** used the higher estimate in the accompanying tables. In 1980, RC 100 sales were an estimated 3.5 million cases; that means the brand enjoyed a year-to-year sales increase of over 300%.

ad campaign

In March, The Seven-Up Co. came out with a new advertising campaign emphasizing 7UP's no-caffeine formula. Industry reaction, particularly Pepsi's and Sunkist's, was immediate and strongly negative.

For it's part, Sunkist was on the verge of a national roll-out of its noncaffeinated formula for regular Sunkist when 7UP released its new campaign.

Royal Crown, which has always been an innovator, according to Maxwell, may have hit upon a new consumer need. Seven-Up is soon expected to introduce a new product called Like to compete with RC 100; as of this writing, 7UP would not confirm or deny rumors about Like. Obviously, Maxwell says, if the noncaffeinated area becomes much larger, he would expect to see other companies, major and minor, move in with competitive products.

Maxwell notes the acceleration of consolidation within the soft drink industry. For example, Dr Pepper now consists of five formerly independent companies. Not only should this trend continue on the manufacturing company level, but Maxwell says it will likely accelerate among bottlers, who now number about 1000 separate entities. Over the next few years, Maxwell thinks this number will continue to drop substantially.

Among second-tier companies, Maxwell notes two leaders: Sunkist volume up 17% in 1981 and Cadbury-Schweppes up 11%. Increased volume for private labels last year indicates to Maxwell that there is some trading down among the populace.

Barq's Root Beer was up almost 22% in '81 and was the best performer in the smaller volume group, followed closely by Squirt, which was up 19%.

Given Maxwell's outlook for the soft drink industry, 1982's per capita consumption could reach 40.5 gallons. That would bring it to the highest level ever achieved by any type of beverage in the U.S., passing the 40-plus figure achieved by coffee in 1962.

Therefore, Maxwell expects the soft drink business will continue as the most dynamic one within the beverage field, due mainly to the high level of sophisticated marketing and management that exists nearly across-the-board. This is unique compared to other areas of the beverage industry, he says.

1979			1980				1981		
Mil. Cases	Pct. Total	Pct. Change	Mil. Cases	Pct. Total	Pct. Change	Company	Mil. Cases	Pct. Total	Pct. Change
195.0	28.9	10.8	214.0	28.5	9.7	Coca-Cola*	240.0	28.8	12.1
142.0	21.1	11.8	178.0	23.7	7.2	Pepsi-Cola#	202.0	24.3	13.5
62.9	9.3	4.0	69.1	9.2	9.9	Dr Pepper	79.5	9.6	15.1
63.6	9.4	1.0	64.0	8.6	0.6	Seven-Up	70.0	8.4	9.4
38.0	5.7	(5.5)	40.5	5.4	6.6	Royal Crown Cola	37.0	4.5	—
6.5	1.0	(7.1)	6.7	0.9	3.1	Dad's	6.8	0.8	1.5
508.0	75.4	7.2	572.3	76.3	7.6	Subtotal	635.3	76.4	11.0
166.0	24.6	8.2	177.7	23.7	7.0	All Others	196.7	23.6	10.7
674.0	100.0	7.0	750.0	100.0	11.3	Total	832.0	100.0	10.9

*Includes Tab and Fresca
#Includes Diet Pepsi and Pepsi Light

U.S. soft drink plants 1940-1980

State	1940	1950	1960	1970	1972	1973	1974	1975	1976	1977	1978	1980	1982
Alabama	100	139	109	73	66	59	59	52	47	45	42	32	29
Alaska	—	—	12	7	7	6	6	5	5	4	4	3	4
Arizona	30	43	33	23	26	23	25	25	23	23	22	24	21
Arkansas	89	120	76	53	49	47	46	40	37	32	33	27	25
California	243	304	203	141	133	132	129	125	117	113	109	94	96
Colorado	63	76	48	34	34	34	36	32	26	26	25	27	19
Connecticut	118	108	81	52	48	47	46	39	37	29	36	30	29
Delaware	20	18	13	10	7	6	6	6	6	5	5	4	4
Wash. D.C.	19	11	5	2	1	1	1	1	1	0	0	1	—
Florida	140	180	142	96	88	84	81	68	62	61	58	54	43
Georgia	150	199	132	98	92	84	82	78	75	71	63	62	64
Hawaii	—	—	26	18	14	15	15	13	10	10	9	9	7
Idaho	22	30	20	17	16	14	14	15	15	15	14	13	14
Illinois	366	326	192	112	98	96	84	80	70	69	65	60	52
Indiana	154	177	112	82	76	76	72	64	57	51	51	46	41
Iowa	130	136	80	42	38	35	29	29	29	28	29	30	21
Kansas	95	105	62	38	34	33	32	30	28	29	29	24	23
Kentucky	103	126	85	62	56	54	53	52	47	45	43	36	36
Louisiana	85	114	75	54	45	46	47	46	42	41	43	38	32
Maine	62	66	51	28	25	23	22	20	19	18	17	13	16
Maryland	71	80	48	36	36	37	38	36	36	35	32	34	30
Massachusetts	226	222	133	85	74	74	73	70	69	63	62	45	40
Michigan	150	169	110	84	80	77	73	67	64	64	56	50	49
Minnesota	125	134	99	60	55	51	52	47	48	49	48	38	38
Mississippi	101	118	96	66	57	55	53	46	42	44	40	37	30
Missouri	190	190	109	77	69	69	65	61	55	51	48	39	37
Montana	31	37	32	25	24	22	21	20	21	19	18	16	18
Nebraska	78	84	54	31	30	28	28	26	25	25	26	25	23
Nevada	13	16	12	11	11	10	10	11	10	10	10	9	8
New Hampshire	34	35	21	15	15	14	12	10	9	11	11	6	8
New Jersey	225	205	139	91	74	73	70	55	52	46	39	33	36
New Mexico	33	40	31	27	26	25	25	22	22	19	22	20	16
New York	514	433	278	171	160	154	153	141	129	116	106	76	98
North Carolina	171	194	131	114	102	101	99	85	82	87	78	70	73
North Dakota	24	29	18	13	12	12	11	11	11	12	9	9	9
Ohio	248	271	172	110	104	101	99	84	82	78	75	62	65
Oklahoma	106	139	90	52	51	49	49	44	44	42	38	32	31
Oregon	42	68	48	35	32	31	31	31	27	27	30	20	25
Pennsylvania	534	508	357	234	213	193	190	171	150	139	130	87	106
Rhode Island	52	50	33	19	17	16	14	14	13	13	11	9	9
South Carolina	86	116	85	63	54	53	50	45	42	43	33	32	30
South Dakota	29	31	23	11	10	10	10	10	10	10	10	7	8
Tennessee	113	146	100	77	73	72	68	62	60	60	55	47	46
Texas	375	419	283	198	178	174	170	163	148	147	136	118	122
Utah	30	39	29	25	25	24	22	21	21	22	20	17	15
Vermont	20	25	14	10	7	7	6	6	6	5	6	6	6
Virginia	117	136	100	65	59	57	53	51	52	49	46	37	40
Washington	59	85	58	35	33	32	31	30	32	34	34	31	26
West Virginia	88	106	72	51	45	43	41	37	36	35	36	25	28
Wisconsin	224	239	169	111	108	104	102	92	86	85	73	61	64
Wyoming	20	20	18	10	10	9	9	9	9	9	7	6	6
TOTAL	**6118**	**6662**	**4519**	**3054**	**3404**	**2797**	**2692**	**2613**	**2246**	**2174**	**2042**	**1731**	**1716**

Source; National Soft Drink Association

Data Bank collects historical information on the industry, we'll be able to project trends for this and the higher-volume groups."

The complete report—excerpted for this special report—also includes the names and address for all the multiple plant operations and each of their manufacturing and distribution centers.

Plants and distribution centers for all of the franchise firms are also detailed in the report.

Average volume per company of the multi-plant operations is $19.2 million each. Average volume for the single-plant operations is $6.8 million.

Copies of the study and additional information is available from Beverage Marketing Corp., 260 Commercial Ave., Mingo Junction, OH 43938; phone 614/598-4133 or in New York, 212/688-7640.

Concentration in the soft drink industry, 1981

Size of firms (soft drink plant operations)	Number of companies	Percent of total	Estimated volume	Percent of total
Over $100 million	33	2.2%	$ 6,600,000,000	42.3%
$50 million to $100 million	33	2.1	2,050,000,000	11.9
$25 million to $49 million	41	2.4	1,025,000,000	6.6
$10 million to $24 million	77	5.4	775,000,000	5.0
Under $10 million	77	5.4	240,000,000	1.7
Subtotal	260	17.2%	$10,690,000,000	67.5%
Single plant operations	908	60.0	5,060,000,000	32.5
Total	1,168	77.2%	$15,750,000,000	100.0%

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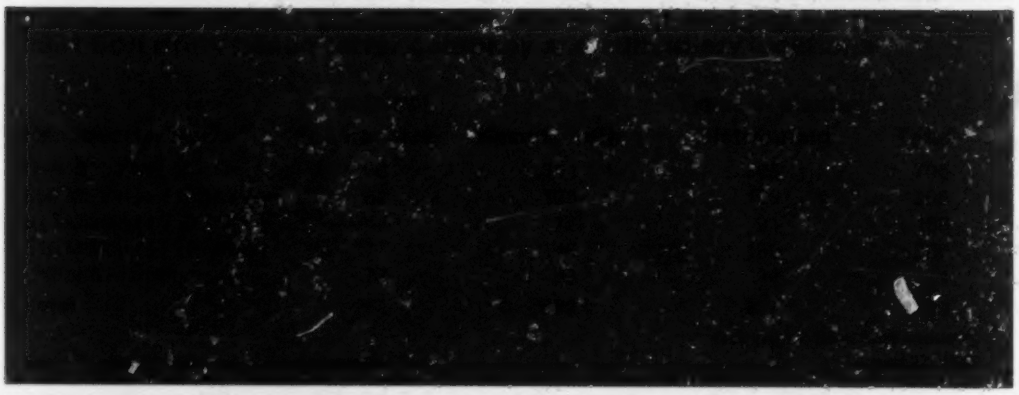


1981 Soft drink headquarter company average plant volumes

Category	Soft drink manufacturing plants Number	Percent of total	Estimated soft drink dollar volume Amount*	Percent	Average volume per manufacturing plant
Headquarter companies	692	42.6%	$13,300,000	67.6%	$19,200,000
All other companies	936	57.3	6,400,000	32.6	6,800,000
Total	1,628	100.0%	$19,700,000	100.0%	$12,100,000

*Add 000

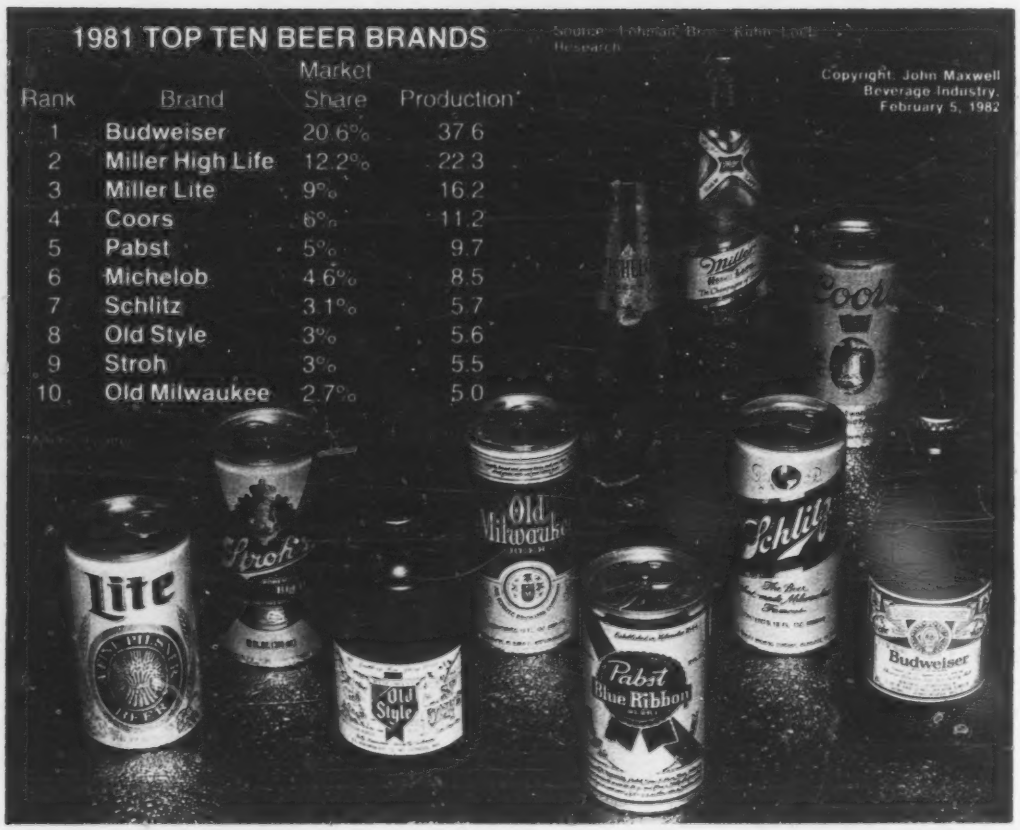
Copyright: Beverage Industry August 27, 1982

NSDA production and consumption of soft drinks

Year	Total Value $ (Wholesale)	Total Cases (288 ounce)	Per capita (12 oz. containers)
1849	760,000	1,013,300	1.1
1859	1,415,000	1,886,700	1.5
1869	4,222,000	5,629,300	4.3
1879	4,742,000	6,322,700	3.0
1889	14,354,000	17,398,800	6.6
1899	23,269,000	25,854,450	8.1
1909	43,508,000	41,436,200	10.8
1919	135,341,000	112,784,100	25.6
1929	214,322,238	181,618,990	35.4
1939	361,690,917	321,997,120	59.1
1945	584,994,000	487,495,000	88.6
1946	617,168,000	514,307,200	88.2
1947	745,676,000	601,109,300	100.6
1948	835,157,300	673,242,500	109.6
1949	860,959,300	675,262,200	108.0
1950	876,532,600	667,834,300	105.3
1951	939,442,500	695,883,300	108.5
1952	1,019,295,000	755,033,300	116.0
1953	1,089,513,000	785,234,700	118.3
1954	1,166,605,000	784,449,300	116.1
1955	1,252,276,000	843,283,300	122.8
1956	1,308,000,000	880,809,300	125.9
1957	1,347,241,500	907,233,300	126.1
1958	1,427,463,500	906,326,000	124.3
1959	1,633,015,900	989,706,700	133.2
1960	1,698,025,600	984,362,700	128.0
1961	1,829,083,200	1,016,157,300	132.2
1962	2,001,016,800	1,111,676,000	142.3
1963	2,341,189,000	1,200,601,000	151.6
1964	2,533,167,000	1,299,060,000	161.9
1965	2,735,567,000	1,402,854,700	172.7
1966	3,175,980,000	1,568,391,300	191.3
1967	3,458,632,000	1,646,968,000	198.7
1968	4,165,552,000	1,851,356,700	221.1
1969	4,369,664,000	1,942,073,300	229.6
1970	4,799,784,000	2,064,423,300	241.9
1971	5,346,960,000	2,235,743,300	258.7
1972	5,683,820,000	2,360,944,700	270.9
1973	6,223,156,500	2,514,406,700	286.4
1974	7,827,131,000	2,532,007,300	286.3
1975	9,397,797,600	2,610,499,300	292.7
1976	10,375,167,000	2,952,474,700	328.7
1977	11,526,810,000	3,247,722,000	359.0
1978	13,344,588,000	3,490,000,000	382.7
1979	14,872,628,000	3,664,300,000	399.6
1980	17,676,648,000	3,816,575,000	409.6
1981	**20,015,269,000**	**3,959,697,000**	**412.3**

Note: 1981 Resident Population 230,508,000 U.S. Department of Commerce, Bureau of the Census. For purposes of the report, all soft drink sales are converted to gallons and expressed in cases of 24 12-oz. containers. Prior to 1977 the standard case was 24 8-oz. containers. The change has been made to more accurately reflect the average size container.

Beer sales up only 2% in 1981


1981 TOP TEN BEER BRANDS
Source: Lehman Bros. Kuhn Loeb Research
Copyright: John Maxwell Beverage Industry, February 5, 1982
Rank | Brand | Market Share | Production*
1 | Budweiser | 20.6% | 37.6
2 | Miller High Life | 12.2% | 22.3
3 | Miller Lite | 9% | 16.2
4 | Coors | 6% | 11.2
5 | Pabst | 5% | 9.7
6 | Michelob | 4.6% | 8.5
7 | Schlitz | 3.1% | 5.7
8 | Old Style | 3% | 5.6
9 | Stroh | 3% | 5.5
10 | Old Milwaukee | 2.7% | 5.0
Lite
Stroh
Old Milwaukee
Schlitz
Budweiser
Pabst Blue Ribbon
Old Style

Domestic beer production usually considered a good measure of sales, rose by only 2% in 1981, compared with 1980, according to John Maxwell, director of research statistics at Lehman Brothers Kuhn Loeb Research, in New York City.

Maxwell's statistics indicate that 177.5 million barrels were produced, excluding 2.5 million barrels of tax-free exports and military. 1980's production volume was 173.3 million barrels.

Maxwell estimates that year-end capacity of all domestic brewers last year was 213 million barrels.

If imports are included in total production/sales, the figure would reach 2.7% in 1981 above the previous year.

U.S. consumption of imported beer brands has been steadily increasing over the past decade to 5.3 million barrels in 1981 (from around a million barrels in the early '70s). Adding the imports puts total U.S. beer consumption last year at 182.8 million barrels.

Only three domestic brewers increased their production volume in 1981: Anheuser-Busch, Miller and Heileman. The latter company, for all practical purposes, is in a tie with Schlitz, whom it has attempted unsuccessfully to acquire.

A-B's production rose 4.3 million barrels to 54.5 million, maintaining the company's no. one position, 14.3 million barrels ahead of Miller, and 40 million barrels above Schlitz and Heileman.

Fifth and sixth on the list are Pabst and Coors, in a virtual tie, with 13.5 million and 13.2 million barrels produced last year. As part

Malt beverage imports by country

(000 barrels)

	January-September			Full Year						
	1980	1981	Change	1977	1978	1979	Change	1980	Change	1981E Change
Netherlands	1,327	1,622	22.2%	1,030	1,538	1,995	29.7%	1,792	(10.2)%	
Canada	1,172	1,299	10.8	760	996	1,292	29.7	1,532	18.6	
Germany	346	431	24.6	327	390	459	17.7	475	3.5	
Mexico	274	274	—	170	205	294	43.4	329	11.9	
U.K., Ireland	121	134	10.7	92	135	124	(8.1)	162	30.6	
Australia	47	43	(8.5)	37	51	73	43.1	65	(11.0)	
Japan	29	34	17.2	24	30	39	30.0	40	2.6	
Philippines	13	23	76.9	27	28	30	7.1	23	(23.3)	
Denmark	19	14	(26.3)	15	24	22	(8.3)	25	13.6	
Norway	12	11	(8.3)	20	22	14	(36.4)	16	14.3	
Other	81	100	23.5	44	52	82	57.7	111	35.4	
Total	**3,441**	**3,985**	**15.8%**	**2,546**	**3,471**	**4,424**	**27.5%**	**4,570**	**3.3%**	**5,300 16.0%**

Source: Lehman Bros. Kuhn Loeb Research

Copyright: John Maxwell, Beverage Industry
February 5, 1982

Brewers' production and estimated year-end 1981 capacity

(million barrels)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	Year-end Capacity 1981E
Anheuser-Busch	26.6	29.9	34.1	35.2	29.1	36.6	41.6	46.2	50.2	54.5	60.0
Miller	5.4(d)	6.9	9.1	12.9	18.4	24.2	31.3	35.8	37.2	40.2	42.0
Schlitz	18.9	21.3	22.7	23.3	24.2	22.1	19.6	16.8	15.0	14.2	13.8
Heileman (a)	9.9	10.5	9.5	10.0	9.6	10.6	10.5	11.3	13.0	14.1	15.5
Pabst	12.5	13.1	14.3	15.7	17.0	16.0	15.4	15.1(j)	15.1	13.5	17.5
Coors	9.8	10.9	12.3	11.9	13.5	12.8	12.6	12.9	13.8	13.2	15.0
Stroh (b)	9.7	10.2	10.1(g)	11.0	10.9	10.8	10.2	9.6	9.8	9.2	11.5
Olympia (c)	4.4	4.7	5.3	6.6	7.3	6.8	6.7	6.0	6.1	5.9	9.0
Genesee	1.7	1.9	2.1	2.4	2.5	2.8	3.0	3.4	3.6	3.6	4.0
Schmidt	3.2	3.5	3.5	3.3	3.5	3.5(h)	3.8	3.8	3.6	3.5	4.3
General	6.2(e)	6.0	5.8	6.1	4.2	4.0	3.5(i)	3.0	2.6	2.1	8.8
Pittsburgh	0.9(f)	0.9	1.0	1.0	0.9	0.7	0.6	0.7	1.5	1.3	1.5
All Others	24.7	20.5	17.8	11.1	11.1	8.3	6.5	6.1	4.9	4.7	5.1
	133.9	140.3	147.6	150.5	152.2	159.2	165.3	170.7	176.4	180.0	213.0
Less tax-free exports and military	2.1	1.8	2.1	1.9	1.8	2.3	2.6	2.6	3.1	2.5	
	131.8	138.5	145.5	148.6	150.4	156.9	162.7	168.1	173.3	177.5	
Imports	0.9	1.1	1.4	1.7	2.4	2.5	3.5	4.4	4.6	5.3	
Total U.S. Consumption	**132.7**	**139.6**	**146.9**	**150.3**	**152.8**	**159.4**	**165.7**	**172.5**	**177.9**	**182.8**	

(a) Includes Carling National for all periods except first three months of 1979
(b) Schaefer & Stroh combined for all years
(c) Includes certain assets of Hamm's acquired March 1975, and pro forma for Lone Star for all years
(d) Pro forma for purchase of Meister Brau as of July 1972
(e) Pro forma for purchase of Ballantine as of March 31, 1974
(f) Strike in August and September
(g) A 40-day strike in April-May had an adverse effect on sales
(h) Includes Rheingold as of December; Rheingold's previous volume included in All Others
(i) Pro forma for Pearl acquisition in January 1978
(j) Includes Blitz

Source: Lehman Bros. Kuhn Loeb Research

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February 5, 1982

Production by brand

(million barrels)

	1977	1978	1979	1980	1981E
Anheuser-Busch					
Budweiser	25.0	27.0	30.0	33.9	37.6
Michelob	6.2	7.5	8.0	8.5	8.6
Busch	3.4	3.6	3.2	2.8	3.1
Michelob Light	—	1.0	2.0	2.6	3.2
Natural Light	1.9	2.5	3.0	2.4	1.9
Other	—	—	—	—	0.2
Total	36.5	41.6	46.2	50.2	54.5
Miller					
High Life	16.5	20.8	23.6	22.7	22.3
Lite	7.5	9.5	11.2	13.2	16.2
Lowenbrau	0.2	1.0	0.9	1.2	1.5
Other	—	—	0.1	0.1	0.2
Total	24.2	31.3	35.8	37.2	40.2
Schlitz					
Schlitz		13.0	10.5	7.5	5.7
Old Milwaukee		3.6	3.7	4.2	5.0
Schlitz Malt		1.8	1.9	2.3	2.5
Schlitz Light		0.6	0.6	0.4	0.3
Erlanger		—	—	0.4	0.6
Other		0.4	0.1	0.2	0.1
Total		19.6	16.8	15.0	14.2
Heileman					
Old Style				5.2	5.6
Schmidt/Rainer				0.9	1.0
Blatz				1.3	1.5
Colt 45				1.2	1.2
All Other				4.4	4.8
Total				13.0	14.1
Pabst					
Pabst		12.7	12.3	11.2	9.7
Olde English (Malt)		0.5	0.7	1.0	0.8
Red, White & Blue		0.5	0.9	1.2	1.4
Blitz		0.3	0.5	0.8	0.5
Pabst Light		0.6	0.7	0.8	0.7
Andeker		—	—	—	0.1
Other		0.8	—	0.3	0.3
Total		15.4	15.1	15.1	13.5
Coors					
Coors		12.1	11.3	11.4	11.2
Coors Light		0.5	1.6	2.4	1.9
Other		—	—	—	0.1
Total		12.6	12.9	13.8	13.2
Stroh					
Stroh				5.7	5.5
Stroh Light				0.5	0.6
Schaefer				3.6	3.1
Total				9.8	9.2

Source: Lehman Bros. Kuhn Loeb Research

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of a major streamlining effort, Pabst recently decided to phase-out its brewery in Peoria Heights, IL, while continuing production at its Newark, NJ facility.

'81 estimates

It is interesting to note that 1981's estimated volume increase of 4.3 million barrels for A-B's flagship brand is greater than the estimated domestic industry increase of 3.6 million. All Anheuser-Busch brands, except Natural light, were up last year, led by Budweiser, with an increase of 11%, to 37.6 million barrels. Natural Light dropped from 2.4 million to 1.9 million, 1980 to 1981, according to Maxwell.

The Miller Lite brand, up by almost 23%, to 16.2 million barrels, continues as the industry's leading light product.

While production of Schlitz' flagship brand continued its decline, another Schlitz product, Old Milwaukee, jumped up to 5 million barrels last year, apparently closing in on the 5.7 million barrels production level of the former.

Pabst', Coors' and Stroh's flagship brands all showed production declines, 1980 to 1981.

Pittsburgh Brewing continues to do reasonably well, according to Maxwell, despite a 17-day strike in May, 1981. The company's Iron City Light is now its main brand, selling some 800,000 barrels. Pittsburg has also had some success with its Pumper, a quarter-barrel keg that is selling somewhere around 100,000 barrels, Maxwell estimates. Pittsburgh's 1981 production was 1.3 million barrels, giving it a 0.7% market share.

new products

In the new product area, Maxwell said that market tests for A-B's Budweiser Light brand, which rolled out early this year, seem to be going well. Miller has tested Magnum, a malt liquor. Maxwell points out that malt liquor as a whole has held up reasonably well considering the current sluggish economy.

An estimated 6.1 million barrels of malt liquor were sold by domestic brewers in 1981, compared with 5.4 million the year earlier. Schlitz

Year-end capacity of leading breweries

(million barrels)

	1978	1979	1980	1981E	1982P
Anheuser-Busch	44.0	47.0	53.5	60.0	66.5
Miller	34.0*	38.0*	40.0	43.0	47.0
Schlitz	30.0	30.0	25.0	18.8	18.8
Pabst	17.5	17.5	17.5	17.5	17.5
Coors	16.0	15.0	15.0	15.0	15.0
Total	**141.5**	**147.5**	**151.0**	**154.3**	**164.8**

*Full-out annual capacity — 24 hours a day, seven days a week. It is necessary to deduct about 15% for comparability.

Copyright: John Maxwell, Beverage Industry

Source: Lehman Bros. Kuhn Loeb Research — February 5, 1982

Brewers' estimated market shares

	1979	1980	1981
Anheuser-Busch	26.8%	28.2%	29.8%
Miller	20.8	20.9	22.0
Schlitz	9.7	8.4	7.8
Heileman	6.6	7.3	7.7
Pabst	8.8	8.5	7.4
Coors	7.5	7.8	7.2
Stroh	5.6	5.5	5.0
Olympia	3.5	3.4	3.2
Genesee	2.0	2.0	2.0
Schmidt	2.2	2.0	1.9
General	1.7	1.5	1.1
Pittsburgh	0.4	0.8	0.7
Others*	4.4	3.7	4.2
Total	**100.0%**	**100.0%**	**100.0%**

*Includes imports

Copyright: John Maxwell, Beverage Industry

Source: Lehman Bros. Kuhn Loeb Research — February 5, 1982

Malt Liquor leads the pack with 2.5 million barrels estimated in 1981, an increase of 350,000 barrels vs. 1980. Heileman's Colt 45 brand equalled its '80 performance with 1.2 million barrels sold in both years. Sales of Pabst's Olde English were an estimated 800,000 barrels last year, down from a million in 1980, according to Maxwell.

In the pricing area, Anheuser-Busch announced increases of between 6% and 7%, efffective November 1, 1981. At the beginning of '82, it was difficult to find anyone who has followed. Yet, Maxwell expected other brewers to fall into line during later months.

Unit increases in the high-priced imported beer brands were up by an estimated 15% in 1981. Nabisco brands' Moosehead was by far the sales leader in 1980, with a gain of 180% over 1979.

Moosehead racked up sales in 1980 of 5.6 million gallons (2 million in 1979) to take a 4% market share (1.5% in '79).

Heineken maintained its substantial lead in the imported brands with 53.5 million gallons sold in 1980, for a 37.8% share of the market. However, Heineken's market share in 1980 was down 9.5% from the previous year.

Knowledgeable industry sources predicted that in 1982, total U.S. malt beverage consumption would rise by a modest 2% to 3% over 1981. Imports, they say, would continue to capture a larger share of the total.

Estimated malt liquor sales volume

(000 barrels)

	1973	1974	1975	1976	1977	1978	1979	1980	1981E
Schlitz (Schlitz)	900	1,100	1,300	1,500	1,700	1,800	1,900	2,150	2,500
Colt 45 (Heileman)	1,100	1,200	1,300	1,400	1,400	1,350	1,000	1,200	1,200
Olde English (Pabst)	—	—	—	—	—	500	900	1,000	800
Champale (Iroquois)	385	350	400	400	700	800	900	900	650
Mickey's (Heileman)									400
Country Club (Pearl)	710	800	550	500	450	400	300	200	200
Magnum** (Philip Morris)	—	80	*	—	—	—	*	—	200**
Malt Duck (Heileman)	—	50	80	100	110	125	100	100	75
Burl Malt (Anheuser-Busch)	80	*	—	—	—	—	—	—	—
900 (Pearl)	—	—	—	—	—	—	—	—	50
Subtotal	3,080	3,380	3,630	4,000	4,360	4,975	4,900	5,350	6,075
All Others	110	120	120	170	200	50	50	50	50
Total	**3,285**	**3,500**	**3,750**	**4,170**	**4,560**	**5,025**	**5,000**	**5,400**	**6,125**

Source: Lehman Bros. Kuhn Loeb Research

Copyright: John Maxwell, Beverage Industry

February 5, 1982

Imported beers taking bigger U.S. market share

Sales of imported beer brands in the U.S. continues to rise significantly. Between 1980 and '81, imported beer brands rose 14.3%, according to **BI**'s director of research/statistics, John C. Maxwell.

Heineken, which sells twice as much as its next competitor, Molson, had the largest gallon increase in the industry last year, 9.4 million gallons, or 17.6% more in 1981 than the year before. Heineken accounts for almost 40% of imported beer volume.

Beck's, Labatt and Moosehead showed the best percentage gains of the major brands. Beck's had a 37% growth from 1980-81. It sold 10 million gallons last year, compared with 7 million in 1980 and 5.5 million in '79. Beck's now holds 6.2% of the total imported beer market, according to Maxwell.

Labatt sales were 30.4% better last year than the year before; Labatt sold about 2 million more gallons in '81 than in '80; this Canadian brand has 5.6% of the market and is in fourth place.

Moosehead's sales growth since 1979 has been spectacular. In '79, the brand sold 2 million gallons; last year it sold almost 8 million, nearly a quadrupling of sales in only three years. Now, Maxwell says, Moosehead sales account for about 5% of the total imported beer market. Sales rose 41% in 1981 over 1980's 5.6 million gallons.

Guinness Harp and Tsingtao are among the fastest growing of the smaller brands, says Maxwell. Guinness Harp sold over 4 million gallons last year, but that represents a 129.4% increase over the year before; the brand sold 1.7 million gallons in 1980.

Tsingtao, from China, approached the 1 million gallon sales mark last year, a 100% increase over 1980. This brand had 0.1% of the market three years ago; it has boosted that share to 0.5%.

Kronenbourg, from France, managed a 71.4% sales increase, 1981 vs 1980; the brand, backed up by heavy advertising in its markets, sold 1.2 million gallons last year.

St. Pauli Girl's success has been attributed to its popularity on college campuses. The brand sold 25% more last year than the year before, or 3 million gallons in 1981, 2.4 million in '80.

Bass Ale, from England, was the only individually-listed brand down: 37.5%; it sold 1 million gallons last year, according to Maxwell.

In 1981, imported beer brands accounted for about 3% of the total beer industry. Maxwell expects this share to increase in 1982.

	1979	% Market	1980	% Market	1981	% Market	1980-81 Change
Heineken	39.1	42.9%	53.5	37.8%	62.9	38.9%	17.6%
Molson	29.3	21.3	31.7	22.4	32.0	19.8	0.9
Becks	5.6	4.1	7.3	5.2	10.0	6.2	37.0
Labatt	6.6	4.8	6.9	4.9	9.0	5.6	30.4
Moosehead	2.0	1.5	5.6	4.0	7.9	4.9	41.1
Dos Equis	7.0	5.1	7.0	4.9	7.0	4.3	-
Carling O'Keefe	-	-	-	-	4.5	2.8	-
Guinness Harp	1.6	1.1	1.7	1.2	3.9	2.4	129.4
Tecate	-	-	-	-	3.8	2.3	-
St. Pauli Girl	2.0	1.5	2.4	1.7	3.0	1.9	25.0
Carta Blanca	1.8	1.3	2.1	1.5	2.3	1.4	9.5
Grolsch	1.4	1.0	1.6	1.1	1.8	1.1	12.5
Foster	1.4	1.0	1.6	1.1	1.7	1.1	6.3
Kirin	-	-	-	-	1.4	0.9	-
Kronenbourg	-	-	0.7	0.5	1.2	0.7	71.4
San Miguel	-	-	-	-	1.1	0.7	-
Bass Ale	1.5	1.1	1.6	1.1	1.0	0.6	(37.5)
Tsingtao	0.2	0.1	0.4	0.3	0.8	0.5	100.0
Amstel Light	-	-	0.5	0.3	0.7	0.4	40.0
Bohemian	-	-	-	-	0.7	0.4	-
Kalbeck	-	-	-	-	0.1	0.1	-
Others	18.2	13.2	17.0	12.0	5.0	3.0	(58.3)
Total	137.7	100.0%	141.8	100.0%	161.8	100.0%	14.3%

Glass, metal containers up despite plastic threat

This year, the glass and metal container industries should show improved performance, despite the continuing threat of plastics. Arthur M. Stupay, industry analyst here at Prescott, Ball and Turben, forecasts an increase in operating rates as capacity is reduced by several container companies in 1982. This, he says, should permit firmer prices and higher profit margins.

Glass containers should be especially strong in soft drinks as the Plasti-Shield bottle gains in both the 10 and 16 oz. markets. Stupay assumes that the .5-L PET bottle will grow slowly until the problems of limited shelf life, taste distortion and cost are overcome.

Cans volume should rise slightly this year, with beer the strongest end-use market. Another factor that will aid some container companies, according to Stupay, is that continued divestiture and diversification will move resources from low margin businesses to higher ones. This, he says, will certainly be true for American Can, Continental Group and Owens-Illinois.

The possible passage of mandatory deposit legislation in several states this year would be a major negative factor affecting containers firms, according to Stupay.

For many packaging companies, 1981 was a low point, Stupay says. But, he believes the future will be brighter for those companies with new technology, land resources, plus effective corporate planning to match returns on capital available in other business.

In 1981, the overall economy (growth rate of GNP) grew at a slightly faster rate in dollar terms than did the packaging industry. While total volume of packaging rose by an estimated 1%, price increases for several categories lagged behind the economy rate, according to Stupay's figures.

Rigid containers (metal and glass) accounted, again, for close to a third of packaging sales last year. Metal can sales totaled an estimated $10 billion, or about 5% above 1980, with volume flat. As a result, says Stupay, cans' share declined significantly in total packaging. Glass containers' dollar share in 1981 rose by an estimated 6% to 7%; volume was down 2.4%. So, glass containers' share of packaging last year also dropped.

This year, Stupay expects packaging output to rise at about the same rate as current dollar GNP, or by 6% to 7%. Glass container sales, he says, should go up by 11% due to better pricing. Glass should experience a small increase in share of packaging, after declines in 1980 and '81.

Metal can sales

Billion cans

End-Use Market	1978	1979	1980	1981E	1982P
Food	30.3	30.0	29	29	30
Beer	28.9	28.7	29	31	31
Soft Drinks	25.5	25.7	26	25	25
Non-Foods	5.1	4.9	5	5	5
Total	89.8	89.3	89	89+	90+

P-Projected; E-Estimated
Source: Prescott Ball & Turben

Copyright: Beverage Industry, May 7, 1982

Glass container Unit Sales

In million gross

End-Use Market	1978	1979	1980	1981E	1982P
Food	92.6	93.2	89.3	91	92
Beer*	106.5	117.7	122.7	113	115
Soft Drinks*	61.4	55.0	57.0	60	63
Liquor	16.5	15.8	15.8	16	17
Wine	8.5	8.5	8.8	9	9
Non-Foods	31.8	29.6	29.5	27	26
Export	2.2	2.9	2.2	2	2
Total	319.5	322.8	326.1	318	324

*Non-returnables and returnables combined
E-Estimated; P-Projected.
NOTE: 1980 and 1981 data have been significantly revised and are still subject to error.
Source: Prescott Ball & Turben

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Price changes: glass versus cans

	Glass Containers		Metal Cans	
	Index	% Change	Index	% Change
1970	120.9			
1971	131.6	+ 8.9	122.0	- 3.7
1972	135.1	+ 2.7	129.3	+ 6.0
1973	138.9	+ 2.8	136.0	+ 5.2
1974	155.5	+12.0	164.7	+21.1
1975	179.7	+15.6	194.6	+18.2
1976	200.0	+11.1[a]	205.0	+ 5.3
1977	214.2	+ 7.0	219.6	+ 7.0
1978	244.4	+14.1	245.4	+11.7
1979	261.2	+ 6.9[b]	271.4	+10.6
1980	292.7	+12.1[b]	302.4	+11.4[b]
1981P	328.5	+12.2	318.1	+ 5.2[c]
1981/70 Avg. Ann.		+ 9.5%		+10.1

a. PBT estimated the increase at 8.7% due to beer discount
b. Increase 1981/71.
c. Effective increase significantly lower due to discounting.

Copyright, Beverage Industry, May 7, 1982

Can sales should rise by 7% to 8%, with merchant sales up at a slower rate. Cans should also account for a greater share of packaging in 1982; cans were weak in 1980 and '81.

Unit shipments of glass containers fell by about 2.4% in 1981, compared to '80; tonnage was off 1%. Two sources of strength, Stupay says, were food containers and one-way soft drink bottles. Capacity was trimmed back as major producers closed older, uneconomic operations.

The big volume gainer for glass last year was NR soft drink bottles, which, along with returnables and one-way bottles, accounted for 2.5 million gross. This was due mainly to increased market share for Plasti-Shield. NR beer bottle shipments declined 8% in 1981, compared to '80 after steady increases. This was partly due to Anheuser-Busch, a major user of cans, increasing market share at the expense of Miller, Stupay says.

Between 1979 and '80, the glass container industry absorbed the full impact of the inroads of the 2-L PET beverage bottle. Only Owens-Illinois came out ahead by dominating output of the industry's most successful new product, the single-service container with Contour-Pak six-pack holder for 10 and 16 oz. bottles.

Plastics began to increase its share of the 1-L size market. This year, about 1 to 2 million gross of .5-L PET beverage bottles will probably be sold, according to Stupay. Shipments of Owens-Illinois' single service bottles may have reached at least 33 million gross, with further strong gains expected in 1982. The smaller-size plastic bottles probably won't threaten O-I's position in this area until 1983, Stupay believes.

With glass capacity at 17.2 million tons in 1979, companies' operating rates was 75.6%. Last year, with capacity estimated at 16.7 million tons, the projected operating rate was 78%, according to Stupay. This compares with about 80% in 1978 and 85% in 1969-70. It is apparent, says Stupay, that additional older capacity must go in order to bring operating rates up.

For glass, 1982 should be better than 1981, Stupay believes. First, most companies have reduced operations and costs. Second, energy costs should rise only modestly. Third, productivity should rise by 3% to 5%. Fourth, 1982 is the third year of a three-year labor contract with the Glass Bottle Blowers Association; the contract contains a smaller increase than in the first year. Finally, glass will not be threatened by plastic in the smaller-size beverage bottle market until 1983. Stupay predicts a 2% increase in glass container volume, '82 vs. '81.

metal cans

Metal can sales were flat in volume terms last year, compared to '80, Stupay says. Self-manufacture of cans rose by 6%; merchant sales were off by 2%. Cans for beverage and beer were the dominant end-uses, accounting for 64% of total can shipments last year. Cans for beer rose 4.5%; soft drinks were down slightly.

In soft drinks, the modest result in can sales was due to the economy and to the success of glass in 10 and 16 oz. sizes. Stupay predicts that the success of plastics and glass will continue to moderate can sales for soft drinks in 1982-1983.

Two-piece cans accounted for over 96% of total soft drink can output; shipments were up by 13% in 1981. Three-piece cans were down by 77%. Aluminum cans rose by 19%, and two-piece steel cans were off 4%. For beer, three-piece cans were less than 1% of shipments. Aluminum dominated, with volume

increasing by 12%. Two-piece steel cans' use fell, with A-B and other shifting to aluminum in mandatory deposit states because of high scrap value, according to Stupay.

Last year, the can industry operated at 70% to 75% capacity. It estimated that there may be as much as 8 to 10 billion units of capacity not finding market in early 1981, out of a total can market of 90 billion units, Stupay says. He predicts that by mid-1982, the industry will, therefore, reduce manufacturing capacity.

This year, Stupay expects sales will rise only modestly, maybe 1%. Soft drinks' use will probably be flat, or slightly down, cans for beer, however, should increase. As capacity is reduced, prices should rise with the cost of the metal; they were up 5% in 1981. The major challenge for can companies this year, Stupay believes, is to find ways to moderate the impact of plastics and glass on the major can markets.

The problem for plastic bottles in 1981 was that PET beverage bottle production capacity was ample and possibly burdensome after being extremely tight until mid-1979, Stupay says. Last year, effective capacity was over 3 billion units; production of both 2-L and 1-L sizes may have exceeded 2.4 billion units. Thus, Stupay says, the operating remained at under 80%; where capacity was ample, there was discounting and reduced profits.

In 1981, .5-L PET soft drink bottles showed up in several test markets. Perhaps 100 to 200 million units were produced, Stupay says. He estimated that .5-L bottles cost close to $100 per 1,000 units. The reported drawbacks with .5-L PET could, Stupay says, be solved with a new line of saran-type coatings (from Dow Chemical), which extend shelf-life and lessen cost by reducing resin volume.

In 1982, Stupay expects .5-L production capacity will be 1 billion bottles annually. New machinery from Van Dorn and Cincinnati Milacron, which can form a reported 7,000 to 8,000 bottles per hour, compared to around 2,000 for 2-L PET, should, Stupay says, reduce labor and capital costs by almost half.

Based on cost-price experience, solid-state polyester resin prices should increase between $0.012 and

Beer package mix

Volume in billion 12 ozs. equivalents

	Cans		1-way bottles		Ret. bottles		Plastic bottles		Total	
	vol.	% of market	vol.	% of market	vol.	% of market	vol.	% of market	vol.	% of market
1979 actual	28.7	58.3	15.9	32.4	4.6	9.3	NA	—	49.2	100.0
1980 actual	29.5	58.5	16.4	32.5	4.5	9.0	NA	—	50.4	100.0
1981 estimated	30.7	59.4	16.4	31.7	4.6	8.9	NA	—	51.7	100.0
1982 projected	31.8	60.0	16.8	31.7	4.4	8.3	NA	—	53.0	100.0
1983 projected	32.9	60.2	17.3	31.7	4.4	8.1	NA	—	54.6	100.0
1984 projected	33.9	60.3	17.3	30.8	4.3	7.7	.7	1.2	56.2	100.0
1985 projected	35.0	60.4	17.3	29.8	4.3	7.4	1.4	2.4	58.0	100.0

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February 19, 1982

Soft drink package mix

Volume in billion 12 ozs. equivalents

	Cans		1-way bottles		Ret. bottles		Plastic bottles		Total		% change from previous year
	vol.	% of market	vol.	% of market	vol.	% of market	vol.	% of market	vol.	% of market	
1979 actual	25.7	37.6	10.6	15.5	23.3	34.0	8.8	12.9	68.4	100.0	
1980 actual	25.7	36.1	10.7	15.0	23.6	33.3	11.1	15.6	71.1	100.0	3.9
1981 estimated	25.0	33.8	11.5	15.6	24.8	33.5	12.6	17.1	73.9	100.0	4.0
1982 projected	26.0	33.8	12.0	15.6	24.2	31.5	14.7	19.1	76.9	100.0	4.0
1983 projected	27.3	34.0	12.2	15.2	25.0	31.0	15.9	19.8	80.4	100.0	4.5
1984 projected	29.0	34.5	12.8	15.2	25.0	29.8	17.2	20.5	84.0	100.0	4.5
1985 projected	30.7	35.0	13.6	15.5	25.0	28.4	18.5	21.1	87.8	100.0	4.5

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place in Kansas City.

A spokesman at Liberty Glass suggests that the growth in popularity of the 2-L PET bottle seems to have plateaued in its market in the eastern United States. Liberty believes that by 1984-85 the size of the market for single service units may be double what it is now.

Mead executives feel that in 1982 the single service sizes (10 and 16 oz. bottles) will grow rapidly, positioning glass against cans. The downward trend in the popularity of cans is said to be the major story of 1981.

Mead says it is concentrating on packaging of soft drink and beer cans in 12 pack multiples with a packaging system called Duo-Dozen. Whether it's cans or bottles, Mead asserts that the best way to increase unit sales is with multiple packaging, and the best material for the job is paperboard.

The company says that paperboard has eroded Contour-Pak dominance in packaging single service bottles (Plasti-Shield) and Mead is preparing programs in 1982 to strengthen paperboard's share.

Market share statistics seem to back Mead up. Between 1980 and '81, Contour-Pak lost about 12% of the market for NR single service packaging. 16 oz. and under: 66% in 1980; 54% in '81. Meantime, paperboard gained 10 percentage points in that market during the same two-year period: 33% in '80; 43% in '81.

visibility of graphics

A source at C.W. Zumbiel said he thought bottlers were doing themselves a disservice by using Contour-Paks because, he said, it's difficult to orient the logos on bottles for optimum brand visibility. Paperboard wraps or basket carriers, he said, are the better bet because they permit large package graphics without adjusting bottles and because they're less expensive than Contour-Pak: about 4 cents less per case.

Consumer complaints concerning Contour-Paks have been circulating, report some paperboard packagers, that bottles are hard to remove from the carriers, they don't stack well and they can interfere with threaded closures causing product venting.

Why then does Contour-Pak enjoy market dominance in single service packaging? Paperboard companies admit that "they jumped in ahead of us and got an edge."

Contour-Pak maker Owens-Illinois says that the polyethylene carriers are best for single-service size multipackages. The carrier fits cosily on top of Plasti-Shield bottles in four, six or eight packs. Under-the-carrier promotional messages are easily visible and don't interfere with bottle graphics.

The carriers also stay strong and dry in wet conditions, are easy for bottlers to apply, are easy for consumers to carry and help reduce inventory cost through standardization, according to O-I.

carriers for cans

The carrier market for soft drink cans continues to be mainly Hi-Cone. Although, Hi-Cone's share dipped slightly in 1980 to 1981: 66% to 64%.

Sources suggest that the market share for film, in this category, holding steady at 4% in both years, refers to six-packs and a few eight-packs of cans.

Also, paperboard's share (3% in 1980 and 6% in '81) refers to 12-packs of cans, according to a source. Hi-Cone also leads in secondary packaging of beer cans. They have a 68% share in six-packs, down from 73% in 1980. Larger multiples of beer cans are moving up in market share. Twelve-packs of paperboard/corrugated registered a 4 percentage point gain 1980 to '81; and 24-pack multiples edged up one percentage point in the period to 7%.

Paperboard maintains its almost total dominance in the returnable soft drink bottle market, with 92% share in both '80 and '81. Returnables (eight-bottle, 16 oz. packs) are reportedly doing very well in Midwest markets. Single service NRs, on the other hand, appear to be taking over in the rest of the country, according to sources.

Secondary packaging trends

(share of market by percentage)

Soft drinks	1980	1981
Cans		
Hi-Cone	66	64
Loose	27	26
Film	4	4
Paperboard	3	6
NRs[1]		
Contour-Pak	66	54
Plastic clips	1.5	3
Paperboard	33	43
NRs[2]		
Paperboard	1	1
Loose	99	99
Plastics[3]		
Paperboard	5	10
Loose	95	90
Returnables		
Paperboard	92	92
Loose	2	2
Plastic	6	6

Beer	1980	1981
Cans		
Hi-Cone	73	68
12-Pack[4]	21	25
24-Pack[5]	6	7
NRs		
Loose[6]	13	13
6-Pack (basket)	41	40
6-Pack (wrap)	40	40
12-Pack (wrap)	6	7
Returnables		
Loose	90	90
Basket	10	10

[1] Single service; 16 oz. and under
[2] Single service; .5-L and under
[3] Family size; over .5-L
[4] 99% paperboard; 1% corrugated
[5] 10% paperboard; 90% corrugated
[6] Includes quart size bottles

Source: BI estimates

Copyright: Beverage Industry, March 12, 1982

Coke Sprite and Tab; it greatly reduced funding for Fresca.

PepsiCo total exprnditures for soft drinks went down significantly, by $15.5 million. However, the company increased sales '80 to '81 by 5.6%, the largest increase of the major producers.

Coke and Pepsi market-by-market strategies are discernible by examining the revised LNA data. For example, PepsiCo spent $16 million less in '81 on Pepsi-Cola. That money came out of network television: $20.5 million in '80; $4.4 million last year.

The company spent about the same ($18.5 million) each year for spot TV ads. But, following a previously-announced marketing pattern, PepsiCo put more emphasis on "customizing" its Pepsi Challenge ads as "awareness levels" of the program reached more regions of the country.

PepsiCo also avoided magazine ads entirely in both years to promote the flagship brand. Coca-Cola spent around $200,000 in both years promoting its flagship brand in magazines.

Coke increased its spot advertis-

Soft drink ad

	Unit Volume Basis			Advertising Expenditures			
	Percentage Total Market		Unit Vol. Change	1980		1981	
	1980	1981	1980/81	$ Mil.	Pct.	$ Mil.	Pct.
Coca-Cola							
Coca-Cola	24.3%	24.2%	2.7%	$ 35.8	15.0%	$ 38.3	17.2%
Sprite	2.9	2.9	4.1	10.7	4.5	11.5	5.2
Tab	3.2	3.6	14.9	12.6	5.3	15.2	6.8
Fanta	1.7	1.5	(10.2)	—	—	—	—
Mr. Pibb	0.7	0.6	(12.8)	1.2	0.5	0.7	0.3
Mello Yello	0.8	0.9	6.0	3.4	1.4	2.8	1.3
Fresca	0.4	0.4	6.0	7.3	3.1	3.7	1.7
Others	0.4	0.4	4.0	0.1	—	1.3	0.6
Total	**34.4%**	**34.5%**	**3.0%**	**$ 71.1**	**29.8%**	**$ 73.5**	**33.1%**
PepsiCo							
Pepsi-Cola	17.9%	18.3%	4.5%	$ 39.7	16.7%	$ 23.7	10.6%
Diet Pepsi	2.6	2.9	12.3	11.6	4.9	12.1	5.4
Mountain Dew	2.9	3.0	5.9	10.2	4.3	10.9	4.9
Pepsi Light	0.4	0.5	20.8	5.2	2.2	5.0	2.2
Teem	0.3	0.2	(6.7)	0.1	—	0.1	—
Aspen	—	—	(5.9)	0.5	0.2	—	—
Others	0.3	0.2	—	—	—	—	—
Total	**24.4%**	**25.1%**	**5.6%**	**$ 67.3**	**28.3%**	**$ 51.8**	**23.1%**
Seven-Up							
Seven-Up	5.4%	5.0%	(5.0)%	$ 25.5	10.7%	$ 23.4	10.5%
Sugar-Free Seven-Up	1.1	1.2	9.4	7.9	3.3	7.1	3.2
Howdy Flavors	—	—	—	—	—	—	—
Dixie Cola	0.2	0.1	(11.1)	—	—	—	—
Quirst	—	—	—	—	—	—	—
Total	**6.7%**	**6.3%**	**(2.8)%**	**$ 33.4**	**14.0%**	**$ 30.5**	**13.7%**
Dr Pepper							
Dr Pepper	5.5%	5.4%	0.9%	$ 11.0	4.6%	$ 9.7	4.4%
Sugar-Free Dr Pepper	1.2	1.3	15.1	2.9	1.2	3.1	1.4
Others	—	—	—	0.2	0.1	—	—
Total	**6.7%**	**6.7%**	**3.4%**	**$ 14.1**	**5.9%**	**$ 12.8**	**5.8%**

ing on TV about $4 million in '81 to the tune of $20.4 million. Coke also took about a million dollars off its network TV budget for 1981. Diet Coke intro in 1982 will boost this firm's outlay.

While PepsiCo raised its outdoor budget for Pepsi by about $200,000, '80 to '81, Coca-Cola maintained its $2.4 million outdoor budget during both years.

7UP reduced

Seven-Up reduced ad expenditures $2.9 million, '80 to '81. The company also experienced a 2.8% decline in soft drink sales over the period.

With the new campaign positioning 7UP as a decaffeinated softdrink, and with the introduction of Like decaffeinated cola, the company is expected to show a much greater level of advertising and promotion spending for 1982. Like was advertised in eight test markets.

The 7UP brand budget for network TV dropped about $3 million, '80 to '81. The company also dropped a million dollars off its flagship brand budget for spot TV.

expenditures, 1980-'81

	Unit Volume Basis: Percentage Total Market 1980	Percentage Total Market 1981	Unit Vol. Change 1980/81	Advertising Expenditures 1980 $ Mil.	1980 Pct.	1981 $ Mil.	1981 Pct.
Canada Dry							
Canada Dry Beverages	2.0%	2.2%	8.8%	$ 7.9	3.3%	$ 10.1	4.5%
Barrelhead	0.3	0.2	(6.5)	1.3	0.5	0.8	0.4
Others	0.5	0.4	(19.4)	—	—	—	—
Total	**2.8%**	**2.8%**	**2.1%**	**$ 9.2**	**3.8%**	**$ 10.9**	**4.9%**
Welch's	**0.5**	**0.5**	**5.3**	**2.6**	**1.1**	**1.6**	**0.7**
Others	**1.3**	**1.0**	**(19.3)**	**—**	**—**	**—**	**—**
Grand Total	**11.3%**	**11.0%**	**1.0%**	**$ 25.9**	**10.8%**	**$ 25.3**	**11.4%**
Royal Crown							
Royal Crown	2.9%	2.8%	1.5%	$ 6.5	2.7%	$ 3.0	1.3%
Diet-Rite Cola	0.6	0.6	—	3.4	1.4	5.1	2.3
Nehi and Others	0.8	0.7	(14.0)	0.1	—	0.1	—
Total	**4.3%**	**4.1%**	**(1.8)%**	**$ 10.0**	**4.1%**	**$ 8.2**	**3.3%**
Crush International							
Hires, Crush, etc.	3.2%	3.2%	3.9%	$ 0.9	0.4%	—	—%
Sun Drop	0.4	0.4	1.9	—	—	—	—
Total	**3.6%**	**3.6%**	**3.7%**	**$ 0.9**	**0.4%**	**—**	**—**
Dad's Root Beer							
Dad's Root Beer	0.6%	0.6%	(0.3)%	$ 0.6	0.2%	$ 0.5	0.2%
Diet Dad's	0.1	0.1	1.5	—	—	—	—
Bubble Up	0.3	0.3	18.6	0.4	0.2	0.2	0.1
Total	**1.0%**	**1.0%**	**5.1%**	**$ 1.0**	**0.4%**	**$ 0.7**	**0.3%**
Schweppes	**1.1%**	**1.2%**	**11.1%**	**$ 4.8**	**2.0%**	**$ 5.0**	**2.2%**
A&W Root Beer	**1.0**	**1.0**	**5.2**	**4.1**	**1.7**	**4.5**	**2.0**
Squirt	**0.9**	**1.1**	**19.0**	**0.4**	**0.2**	**0.5**	**0.2**
Faygo	**0.4**	**0.4**	**14.0**	**0.2**	**0.1**	**1.7**	**0.8**
All Others	**10.9**	**10.7**	**—**	**19.3**	**8.1**	**21.2**	**9.5**
Total	**100.0%**	**100.0%**	**2.7%**	**$238.4**	**100.0%**	**$222.9**	**100.0%**

Sources: Leading National Advertisers Inc., TV Bureau of Advertising from Broadcast Advertisers Reports and Lehman Brothers Kuhn Loeb Research.

Copyright: John Maxwell, Beverage Industry, July 9, 1982

The 7UP brand outlay for outdoor ads was boosted from $446,000 in '80 to $1.9 million in '81.

The grand total of soft drink advertising outlays by the Dr Pepper Co. was virtually unchanged at $25.9 million in '80 and $25.3 million in '81. Funding for Canada Dry beverages went up $2.2 million, to $10.1 million in 1981.

Dr P off $1.3m

In 1980, Dr Pepper brand was allocated $5.3 million for spot TV ads; last year that figure was down to $2.2 million. Total expenditures for Dr Pepper brand in the six media were off $1.3 million.

At Dr Pepper Co., advertising money is lumped under a "marketing expenses for promotion/advertising" entry in the corporate budget. A company source said that entry increased $8 million, '81 over '80. The total co-op budget, not represented in LNA data, according to this source, rose 50% in the period. Co-op outlays is a system of matching funds from the franchiser to the bottlers utilizing a predetermined formula based on gallons sold.

Royal Crown Cola Co. dropped its ad spending '80 to '81 by $1.8 million, to a total of $8.2 million. Outlays for Royal Crown Cola brand were cut by more than half, from $6.5 million to $3.0 million. The company apparently shifted money into advertising for Diet-Rite Cola, which accounted for $3.4 million in '80 and $5.1 million in '81.

A source at the company said that **BI**'s totals for Royal Crown Co. were low, perhaps by almost $4 million in 1981. He said that Royal Crown increased ad expenditures in the two-year period from $11 million to about $12 million. Royal Crown undoubtedly did increase outlays in the fourth quarter of '81, when it unveiled RC 100.

All of the so-called "second-tier" companies spent more ad dollars in '81 over '80. Schweppes was up $200,000, A&W Root Beer rose $400,000, Squirt was up $100,000 and Faygo increased $1.5 million. Faygo spent 6.75 cents per case last year, compared with 0.90 cents the year before.

Also, all of these companies experienced significantly better sales over the two-year period. Faygo, for instance, raised unit volume sales 14%; Squirt was up 19%. Philip Feigenson, v.p. at Faygo, attributed the firm's sales performance to a combination of effective promotion, a higher advertising budget and an enlargement of the distribution territory.

Per case SD ad expenditures, 1980-'81

(¢ per case)

	1980	1981
Coca-Cola Company		
Coca-Cola	2.51	2.62
Sprite	6.26	6.46
Tab	6.70	7.04
Fanta	—	—
Mr. Pibb	3.08	2.06
Mello Yello	6.80	5.28
Fresca	28.08	15.42
Others	0.40	5.00
Total	**3.52**	**3.53**
PepsiCo		
Pepsi-Cola	3.76	2.15
Diet Pepsi	7.53	6.99
Mountain Dew	6.04	6.09
Pepsi Light	21.67	17.24
Teem	0.67	0.71
Others	3.53	—
Total	**4.69**	**3.42**
Seven-Up		
Seven-Up	8.04	7.77
Sugar-Free Seven-Up	12.34	10.14
Howdy Flavors	—	—
Dixie Cola	—	—
Total	**8.54**	**8.03**
Dr Pepper		
Dr Pepper	3.41	2.98
Sugar-Free Dr Pepper	4.20	3.90
Others	—	—
Total	**3.60**	**3.16**

	1980	1981
Canada Dry		
Canada Dry	6.93	8.13
Barrelhead	8.50	5.59
Others	—	—
Total	**5.60**	**6.50**
Welch's	**8.67**	**5.06**
Others	**—**	**—**
Grand Total	**3.91**	**3.78**
Royal Crown		
Royal Crown	3.99	1.95
Diet-Rite Cola	9.19	13.78
Nehi and Others	0.20	0.23
Total	**3.94**	**3.29**
Crush International		
Hires, Crush, etc.	0.48	—
Sun Drop	—	—
Total	**0.42**	**—**
Dad's Root Beer		
Dad's Root Beer	1.76	1.47
Diet Dad's	—	—
Bubble Up	2.56	1.08
Total	**1.77**	**1.18**
Schweppes	**7.41**	**6.94**
A & W Root Beer	**7.07**	**7.38**
Squirt	**0.74**	**0.78**
Faygo	**0.90**	**6.75**
All Others	**2.68**	**3.44**
Industry Average	4.06	3.70

Source: Lehman Brothers Kuhn Loeb Research (revised).

Copyright: John Maxwell, Beverage Industry, July 9, 1982

Study reveals slower growth

Expansion continued in the soft drink industry in 1982, but at a slower rate than before. According to this year's tabulations of the annual **Beverage Industry** Purchasing Plans study conducted in December 1981, a total of $277.5 million will be spent on new plant equipment and supplies.

The figure is down slightly (1.2%) from last year's record $281.07 million expenditures. Most notable cutbacks were for multiple packaging equipment, uncasers and bottle cleaners.

Although the survey did not solicit information on why purchasing patterns were changing, the **BI** staff contacted some 25 plant executives as a followup on their survey responses. The majority (18) indicated they were cutting back until they could get a better reading of the economy.

Some typical comments:

"It appears that interest rates are coming down ... we want to hold off and see if we can't get a better deal later in the year or next year."

"We anticipate going into the .5-L PET this year and that might require us to make some purchases, but first we're going to try and run it on our existing line."

"Unemployment in our market is approaching 10% ... sales are off about 7% now and I think we'd be foolhardy to go into a capital expansion program under these conditions."

"I don't see any reason to increase our capacity now ... our plants are relatively new and we're looking to add a second shift in one of them."

In spite of the shaky economy, virtually all of the executives were optimistic that the Administration's policies would eventually cause a reversal of the recessionary trend.

Packaging and material handling equipment purchases

Category	Projected '81	% change vs. '80
Multiple Packaging for bottles/cans[1]	$3.2	(31.9)
Uncasers	5.2	(32.5)
Case packers	6.1	(4.6)
Depalletizers	4.2	NC
Palletizers	7.2	(7.6)
Shrink wrappers	3.0	42.8
Labeling Machines	5.2	NC
Accumulating tables, conveyors	17.0	12.3
Forklift trucks	9.0	2.2
Total	60.1	(9.2)

[illegible]

Copyright: Beverage Industry January 22, 1982

Beverage production equipment purchases

Category	Projected '81	% change vs. '80
Bottle cleaners	33.7	(21.9)
Bottle and can rinsers	5.6	3.7
Bottle/can fillers	44.2	NC
Proportioning/carbonating/cooling equipment	17.6	0.3
Cappers	7.3	8.9
Decappers	4.2	7.6
Change parts 1	12.2	22.0
Refrigeration equipment	2.4	26.3
can/bottle warmers	1.9	NC
Post-, premix equipment	3.1	46.1
Boilers and heaters	8.3	6.4
Syrup and sweetener mixing System & Storage equipment	6.7	6.3
Others 2	6.7	4.6
Total	$153.9	(1.5)

[illegible]

Copyright: Beverage Industry January 22, 1982

(Calculations for this year's study were based on responses from 101 firms. Surveys were mailed to approximately 1600 soft drink plants.)

increases

Distribution expenditures had a 16.2% increase this year with executives increasing their spending for display racks and accounting and data processing systems. This latter area was expected to be up 29.6% this year.

Spending for quality control and laboratory equipment will be up 37.9%, highest of any category in the survey. This hike obviously reflects continuing interest in checking quality of incoming supplies as well as quality of the finished products.

Sparked by this expenditure, the total category of "quality control and sanitation equipment" will be up 11.6%. $3.7 million will be spent on electronic and visual inspection equipment, up 15.6%; coding and marking purchases will total $2 million up 17.6%; sanitation equipment and chemicals will be up 28.7% and total $1.3 million; water treatment equipment, which had one of the highest increases in '81, will be up only 5.4% in '82 and should total $19.5 million.

Perhaps one reason for the drop in planned purchases for multiple packaging equipment was suggested by a key supplier: "Bottlers spent more in '81 for Contour pack application equipment than was usual . . . market expansion of this carrier has slowed. I feel that most of the funds which are spent in this area this year will be for multiple packing of plastic bottles."

Expenditures for uncasers also showed a reduction, down 31.5%. No reason for the decline could be determined, except a suggestion that many plants were planning on going to bulk deliveries for PET in '82. Yet, expenditures for depalletizers—an essential piece of equipment for utilizing bulk delivery—did not support this. According to the survey, there will be no increases in planned expenditures for these units.

Case packer purchases will also be down slightly, dropping 4.6% to $46.1 million. Palletizer purchases should also decline slightly to $7.2 million, down 7.6%.

Shrink wrappers, accumulating tables, and conveyors and forklift truck purchases should all be up.

Total purchases for this category, "Packaging and materials handling equipment" will be down 9.2% in '82, according to the survey.

Except for an anticipated drop in bottle cleaners, expenditures for production equipment should hold up. Across the board increases (with proportioning/carbonating/cooling equipment showing a surprising 17.6% increase) were calculated for all these equipment lines. (**Editor's note:** Vending machines and trucks and trailers were not included in this annual survey.)

Quality control and sanitation equipment purchases

(in millions of dollars)

Category	Projected '81	% change vs. '81
Quality control equipment (for lab)	4.0	37.9
Electronic and visual inspection	3.7	15.6
Coding and marking equipment	2.0	17.6
Sanitation equipment and chemicals	1.3	24.7
Water treatment equipment	19.5	5.4
Total	**30.5**	**11.6**

[illegible] Copyright: Beverage Industry January 22, 1982

Distribution and merchandising equipment purchases

Category	Projected '81	% change vs. '80
Truckloading equipment[1]	$3.3	NC
Hand trucks[2]	1.6	NC
Display racks[3]	9.3	15.4
Uniforms	3.5	NC
Acc'ting & data processing	15.3	29.6
Total	**33.0**	**16.2**

[illegible] Copyright: Beverage Industry January 22, 1982

Allowable usage levels for HFCS vs. sucrose in 1981

Company & Flavor	Sucrose* and 42% HFCS	Sucrose* and 55% HFCS
Coca-Cola		
Coke	100% Sucrose	50/50
Sprite, Fanta, Orange, Hi C	75/25	100% HFCS
Mr. Pibb, Other Allied Products	50/50	100% HFCS
Pepsi Co		
Pepsi	100% Sucrose	50/50#
Mountain Dew	—	100% HFCS
Teem	50/50	100% HFCS
Patio Flavors	100% HFCS	100% HFCS
Seven-Up (Philip Morris)		
7UP	75/25	100% HFCS
Howdy Flavors	75/25	100% HFCS
Quirst	75/25	100% HFCS
Dr Pepper		
Dr Pepper	100% HFCS	100% HFCS
Royal Crown		
RC Cola	75/25	50/50
Nehi Flavors	100% HFCS	100% HFCS
Canada Dry (Norton Simon)		
Barrelhead	50/50	50/50
Wink	50/50	50/50
Flavors	100% HFCS	100% HFCS
Ginger Ale	75/25	75/25
Crush International		
Hires	100% HFCS	100% HFCS
Crush	100% HFCS	100% HFCS
Sundrop	100% HFCS	100% HFCS
Shasta (Consolidated Foods)	—	100% HFCS
Monarch	50/50	25/75
Dad's Root Beer (IC Industries)		
Dad's Root Beer	100% HFCS	100% HFCS
Bubble Up	100% HFCS	100% HFCS
Cadbury Schweppes		
Tonic	76/24	—
Ginger Ale	76/24	—
Flavors	100% HFCS	—
Squirt	100% HFCS	100% HFCS
A&W	—	100% HFCS
Welch	100% HFCS	100% HFCS
Lipton	50/50	25/75
Nestle		
Nestea	100% HFCS	100% HFCS
Sunkist Orange	75/25	75/25

In fountain syrup only

* Where both HFCS and sucrose are used in combination, the sucrose percentage appears first: e.g. 76/24 indicates a 76% sucrose content.

Source: John Maxwell, Lehman Bros. Kuhn Loeb Research

Copyright: John Maxwell, Beverage Industry August 27, 1982

Domestic sugar and HFCS consumption

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Sugar (000 short tons raw)	11,487	11,429	10,945	10,302	10,893	11,099	10,889	10,756	10,189	9,770
HFCS (000 tons, dry)	131.5	218.2	316.9	530.6	786.1	1,038.0	1,358.8	1,731.0	2,174.0	2,675.0
Per Capita (lbs.)										
Total Sugar	102.3	100.8	95.6	89.1	93.4	94.2	91.5	89.3	83.7	79.4
HFCS	1.3	2.1	3.0	5.0	7.2	9.5	12.1	15.4	19.1	23.1
Total	**103.6**	**102.9**	**98.6**	**94.1**	**100.6**	**103.7**	**103.6**	**104.7**	**102.8**	**102.5**

Source: John Maxwell, Lehman Bros. Kuhn Loeb Research

Copyright: John Maxwell, Beverage Industry August 27, 1982

Comparative sweetener costs based on a range of aspartame prices

Cost per pound			Ounces needed for standard soft drink case			Cost per case		
Sugar	**Saccharin**	**Aspartame**	**Sugar**	**Saccharin**	**Aspartame**	**Sugar**	**Saccharin**	**Aspartame**
$0.18	$4.00	$90.00	10.49	0.0350	0.0525	$0.118	$0.009	$0.295
0.18	4.00	80.00	10.49	0.0350	0.0525	0.118	0.009	0.263
0.18	4.00	70.00	10.49	0.0350	0.0525	0.118	0.009	0.230
0.18	4.00	50.00	10.49	0.0350	0.0525	0.118	0.009	0.164
0.18	4.00	45.00	10.49	0.0350	0.0525	0.118	0.009	0.148

Source: John Maxwell, Lehman Bros. Kuhn Loeb Research

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For More Information on Hercules, Circle No. 136 on Reader Inquiry Card

10.5% of firms control 56.7% of bottled water sales

Approximately 10.5% of U.S. bottled water firms—some 34 establishments all with volumes of over $5 million each—control more than half the total U.S. bottled water business. The figures were revealed in a new study recently compiled by Beverage Marketing Corp.

The study, which is the result of almost three years research, pegs the total dollar volume at $637 million; gallonage is 621.3 million. Both numbers are considerably higher than previously published statistics.

"That's one reason we have resolutely pursued this market study,"

Sales range	Number of establishments	Percent of total	Cumulative percent of total	Estimated wholesale sales volume*	Percent of total
$50 million or more	2	.62	.62	$100,000	17.2
$25 to $50 million	0	.00	.62	$0	.0
$10 to $25 million	5	1.54	2.16	$87,500	13.7
$5 to $10 million	16	4.94	7.10	$120,000	18.8
$3 to $5 million	11	3.40	10.49	$44,000	6.9
$2 to $3 million	16	4.94	15.43	$40,000	6.2
$1 to $2 million	98	30.25	45.68	$147,000	23.0
$500,000 to $1 million	89	27.47	73.15	$66,750	10.4
less than $500,000	84	25.93	99.07	$21,000	3.3
subtotal	321			$636,250	
unclassified	3	.93	100.00	$750	.1
total	324			$637,000	

Sales range	Number of establishments	Estimated cumulative wholesale sales volume*	Cumulative percent of total	Estimated gallonage volume*	Percent of total	Estimated cumulative gallonage volume*	Cumulative percent of total
$50 million or more	2	$110,000	17.27	95,000	15.29	95,000	15.29
$25 to $50 million	0	$110,000	17.27	0	.00	95,000	15.29
$10 to $25 million	5	$197,500	31.00	75,000	12.07	170,000	27.36
$5 to $10 million	16	$317,500	49.84	104,000	16.74	274,000	44.10
$3 to $5 million	11	$361,500	56.75	38,500	6.20	312,500	50.30
$2 to $3 million	16	$401,500	63.03	40,000	6.44	352,500	56.74
$1 to $2 million	98	$548,500	86.11	171,500	27.60	524,000	84.34
$500,000 to $1 million	89	$615,250	96.59	71,200	11.46	595,200	95.80
less than $500,000	84	$636,250	99.88	25,200	4.06	620,400	99.86
subtotal	321			620,400			
unclassified	3	$637,000	100.00	900	.14	621,300	100.00
total	324			621,300			

Michael Bellas, BMC president, told **Beverage Industry**, "We just did not believe some of the data being offered."

Bellas's firm, which provides confidential market research information on the soft drinks, beer and related beverage industries, has refined a list of bottled water firms by checking with major industry sources, **Beverage Industry**, association officials and personal contracts.

"The final list which we derived was additionally checked by personal or telephone contact to determine the data we felt was needed to put together the definitive market study," he said.

In addition to a national demographic picture, the 165 page report also has information on regional and state sales and gallonage.

"Since this is BMC's first bottled water report, our initial report does not include trend information," comments Janet Fanshaw, BMC vice president. "In future years, our data will begin to reveal significant changes within the industry."

Dollar sales volume includes bottled water sales and other products which the firms sell or lease to customers such as water fountains, ice machines or dispensing equipment. The gallonage, however, only covers actual bottled water sales.

The number of establishments represents actual locations where filling of bottled water—naturally carbonated and noncarbonated—is done. It does not take into consideration multiple plant ownership. In other words, one firm may own more than one plant.

What the BMC figures show is that two firms, both with volumes over $50 million, control fully 17% of the total dollar volume and 15% of the total gallonage in the bottled water industry.

There are seven plants—the two in the top sales group plus five in the $10-million-to-$25-million category—which constitute 31% of total dollar volume, almost a third of the business.

Bottle water gallonage and sales by state

Region	Number of establishments	Estimated wholesale sales volume*	Estimated gallonage volume*
Alaska	1	$ 750	800
Arizona	7	$13,250	12,500
Arkansas	6	10,500	9,950
California	42	233,500	211,500
Colorado	5	8,750	8,900
Connecticut	6	9,250	10,300
Florida	25	40,750	43,350
Georgia	2	2,750	2,800
Hawaii	1	250	300
Idaho	2	1,000	1,100
Illinois	13	31,750	30,100
Indiana	4	2,750	3,150
Iowa	4	2,750	3,150
Kansas	3	2,500	2,850
Kentucky	4	2,250	2,650
Louisiana	5	14,000	12,850
Maine	3	9,250	8,550
Maryland	5	4,750	5,400
Massachusetts	9	21,250	19,750
Michigan	5	8,000	8,100
Minnesota	4	10,500	9,850
Mississippi	1	250	300
Missouri	4	2,750	3,150
Montana	3	750	900
Nebraska	1	1,500	1,750
Nevada	4	6,000	7,000
New Jersey	13	31,000	30,050
New Mexico	4	2,000	2,200
New York	15	34,000	32,400
North Carolina	5	2,750	3,000
North Dakota	3	750	900
Ohio	17	17,000	19,650
Oklahoma	2	2,250	2,550
Oregon	4	2,000	2,200
Pennsylvania	30	28,000	30,500
Rhode Island	4	2,750	3,150
South Dakota	1	250	300
Tennessee	5	4,000	4,450
Texas	25	52,250	50,800
Utah	2	1,750	2,050
Vermont	1	250	300
Virginia	5	3,250	3,500
Washington	3	1,750	1,900
West Virginia	4	3,250	3,650
Wisconsin	8	5,250	5,850
Wyoming	3	750	900

Regional breakdown

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.
Mideast: Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania.
Great Lakes: Illinois, Indiana, Michigan, Ohio, Wisconsin.
Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.
Southeast: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia.
Southwest: Arizona, New Mexico, Oklahoma, Texas.
Rocky Mountain: Colorado, Idaho, Montana, Utah, Wyoming.
Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington.

Bottled water gallonage and sales by region

*Add 000
Source: Beverage Marketing Corp.

Copyright: Beverage Industry
June 11, 1982

Second most important in sales is the group of 16 plants in the $5 million to $10 million size. This group has $120 million in sales, 18.8%, and sells 104 million gallons, 16.7% of the total.

California dominates

BMC's research, for the first time, clearly establishes the predomination of the Far West region, and California in particular in bottled water.

This region (*see box, this page*) accounts for 38.3% of total U.S. sales; 36% of total gallonage.

California has 36.6% of sales; 34% of total gallonage.

The reason for this lead, according to BMC officials, is poor water quality in the major population centers of the state.

California is also the home base for the two $50-million-plus filling plants.

The next most important area in terms of bottled water sales is the Mideast region which includes the states of Delaware, Maryland, New Jersey, New York, Pennsylvania and District of Columbia. 15.3% of total sales and 15.8% of total gallonage are sold in this region. There are also more individual filling locations in this area: 63.

The Southeast—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia—has 62 plants which have 13.1% of total sales and 13.9% of total gallonage.

Texas is the kingpin of the fourth ranking region. With $52 million in sales and 50.8 million gallons, it ranks second behind California. The Southwest region—Arizona, New Mexico, Oklahoma, Texas—has 10.9% of total sales and gallonage.

Other regions and their shares of sales and gallonage are: Great Lakes, 10.2%, 10.7%; New England, 6.7%, 6.8%; Plains, 3.3%, 3.5% and Rocky Mts., 2.0%, 2.2%.

To obtain a copy of the complete report, contact Beverage Marketing Corp., 2670 Commercial Ave., Mingo Junction, OH 43938; Phone 614-598-4133 or phone, In New York, 212-688-7640.

Fast food growth spurs bulk sales

Bulk soft drink sales for 1980, advancing a respectable 4.9% according to NSDA's latest sales survey, may mark the beginning of dramatic shifts in technology and the continued expansion of fast-food chains.

Outpacing individual growth in all other soft drink segments, success in bulk sales can be largely attributed to the increasing popularity and spread of fast-food units in the country. Though the restaurant industry has experienced sales decline in the past two years, soft drink fountain sales were not severely impacted because the fast-food sector of the restaurant industry was hurt less than other segments. A spokesperson for the National Restaurant Assn. (NRA) attributed trading down by consumers as giving economic mobility to these chains.

Further opportunities for expansion of the fountain market may come with the expectations of industry observers for continued development of fast-food chains and the potential for significant real sales growth in the restaurant industry. The installation in other types of retail outlets provides another avenue for growth. The Southland Corp. has placed fountains in most of its nearly 7,000 7-Eleven convenience stores. Further down the road, there is speculation that home mixing and dispensing units will provide yet another outlet for sales of the post-mix syrup used in fountains.

The dominant factor in the fountain market is Coca-Cola, with a lead of almost three-to-one over Pepsi-Cola, according to industry observers.

Due largely to the company's unique marketing approach, fountain sales account for about 33% of Coca-Cola's total U.S. volume. In its franchise bottler agreements, the company has always maintained the right to service fountain accounts directly, thus keeping this sector under the control of corporate headquarters.

Another part of Coca-Cola's success stems directly from the presence of its product in most McDonald's restaurants, reflecting that firm's approval of the brand for use in all company-operated or franchised units. Other than McDonald's, few if any, restaurant firms have the power to influence the choice of soft drink brands by franchises.

competition

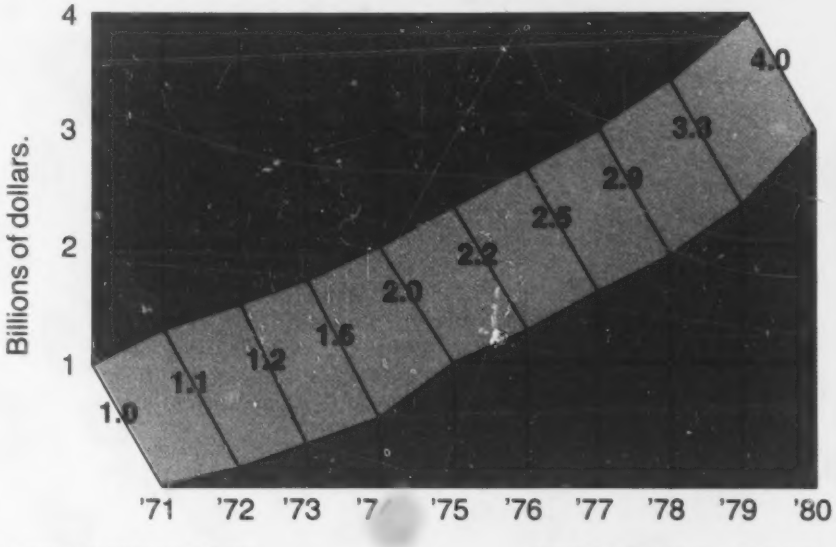
Coca-Cola's dominant position is not taken lightly by Pepsi-Cola who has begun mounting pressure to even up the three-to-one ratio. Competition revolves around gaining installations, rather than on short-term promotions in food stores. Pepsi-Cola now has a separate food service division to organize fountain marketing efforts. Among those outlets that already carry Coca-Cola and are not interested in a competing cola, such as Pepsi, the attempt is to increase acceptance of Mountain Dew.

Dr Pepper has also been active in its attempts to expand its fast-food affiliation and estimates its fountain availability to consumers at more than 40%.

Thomas L. Kalahar, executive vice president of marketing operations for Dr Pepper, evaluated his company's position in the trade and fountain market by stating, "It's dangerous to make generalizations, but let's make an attempt, recognizing there are exceptions to every one. First, except in a few of Dr Pepper's strongest markets, our brands are not viewed by the trade as key brands that are part of their regular merchandising cycles. Second, the trade is not aware of the size and relative importance of Dr Pepper, both within the soft drink industry and compared to other categories. Third, there are no strong negative trade attitudes about Dr Pepper that we have to overcome. Fourth, and perhaps most critical, Dr Pepper is not as

Bulk soft drink sales growth

(in billions of dollars)



Source: NSDA sales survey 1971-1980

Copyright: Beverage Industry April 23, 1982

Shipments of beverage venders decline, 9%

According to the latest figures from the Dept. of Commerce for 1980, manufacturers' shipments of vending machines for beverages totaled $207 million, a decrease of 9% from the 1979 figure of $227 million. Given these statistics, while remembering the 1979 decrease of approximately 15% over 1978, a vivid trend has begun to establish itself in this industry.

Industry observers point to the current high cost of money, compounded by the vending purchaser who seems uncertain about electronic vending. The hesitancy of potential vending buyers may be a fear of the technology itself: Are the bugs out of the machines available on the market? Will developments push costs to an unattainable level?

Leo Levasseur, executive vice president and general manager for Coin Acceptors, Inc., says, "Like every other industry, technology is advancing. But the cost and reliability of performing a service for the customer is best done with a properly designed electronic system. We feel there is a balance that can be realized in electronic venders". Levasseur's balance takes form in creating a vending unit that weighs cost, complexity and reliability against the target objective. "You can take advantage of technology but you have to know how far to go."

Coinco's designs in accountability and management information systems (MIS) allows the vendor complete control over the unit. The company's line of changers can be adapted to the majority of working units to offer the latest in electronic vending technology.

The need for electronics in vending is given a persuasive argument when citing the management information available.

When a vend is made in the coin changer a total dollar sales readout is accounted, complete with cash sale, type of product vended and time of purchase. In addition, most electronic systems can eliminate theft from the cash box, unapproved price changes, and substitutions of unauthorized merchandise. Though this information may be a boon to many venders, the need of this type of operation must be considered individually.

The basic task of all vending machines is to efficiently service both customer and owner. A customer must be able to quickly get in and out of a vending system what he needs. An owner must be able to retrieve information from the machine to achieve the most efficient

1980 vended product volume

Product	Percent share	Dollar volume
Hot drinks	8.2%	$1,142,000,000
Cup cold drinks	7.1%	980,000,000
Canned cold drinks	19.8%	2,742,000,000
Bottled cold drinks	9.0%	1,255,000,000
Packaged confections/snacks	13.3%	1,850,000,000
Bulk vending	3.4%	470,000,000
Milk	2.3%	322,000,000
Ice cream	0.5%	68,000,000
Pastries	1.9%	260,000,000
Hot canned foods	1.1%	151,000,000
All-purposed vendor foods	4.6%	636,000,000
Cigarettes	22.9%	3,175,000,000
Cigars	0.2%	23,000,000
All other	5.7%	790,000,000
Totals	100.0%	$13,884,000,000

Source: Vending Times

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1980 Operating ratio report

Composite average of all operators reporting related data

	1980	1979
Sales at retail	100.0%	100.0%
Cost of sales	45.5	46.2
Gross profit	54.5%	53.8%
Total operating expenses	52.4	50.1
Operating profit	2.1%	3.7%
Other income	1.1%	1.2%
Profit before income taxes	3.2%	4.9%

Source: NAMA

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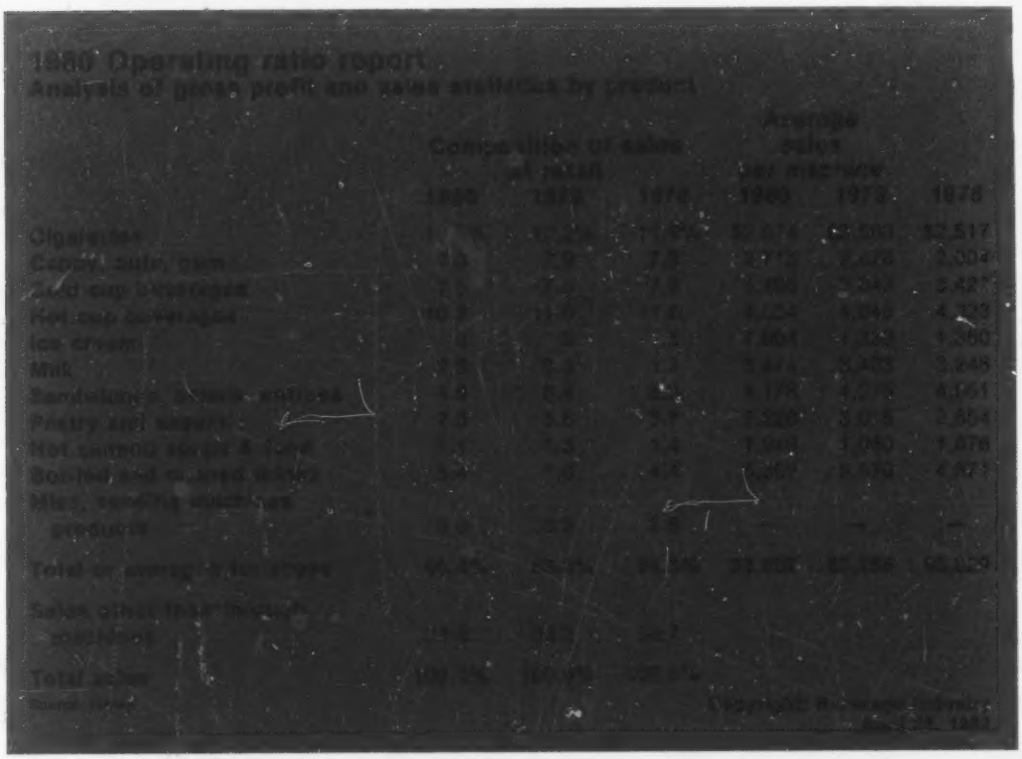
use of his people, time and investment. In realizing these fundamentals, electronics must not interfere but act simply and efficiently.

Coinco's work with C-MOS (complimentary metal oxides semiconductors) logic controllers allows a vending unit to do just that. Levasseur notes that "when you install this type of unit, a machine is able to do what it did before, but with fewer switches, wires and relays."

A unit can be molded or retrofitted into whatever the customer needs, even visual readout or audio sound back. With electronics' ability to satisfy most desires of vendors, price control must come from the customer identifying his specific need and not by letting the technology run away with his wallet.

Though vending shipments have dropped for the year, vending activity seems to be running at an accelerated pace. Anticipation of new and retrofitted units may decrease shipments in the next year, but the existing marketplace of vending will see a burgeoning of new developments.



1980 Operating ratio report

Analysis of gross profit and sales statistics by product

	Composition of sales at retail			Average sales per machine		
	1980	1978	1976	1980	1978	1976
Cigarettes	17.7%	17.6%	17.6%	$2,074	$2,517	$2,517
Candy, salty, gum	23.1	23.9	24.8	2,712	3,004	3,004
Cold cup beverages	11.5	11.2	10.8	1,350	2,427	2,427
Hot cup beverages	10.2	10.0	9.8	1,197	4,339	4,339
Ice cream	2.1	2.1	2.1	247	1,060	1,060
Milk	2.8	2.8	2.8	329	3,248	3,248
Sandwiches, snacks, entrees	5.0	5.0	5.0	587	4,061	4,061
Pastry and bakery	7.0	5.6	4.2	822	2,854	2,854
Hot canned soups & food	1.1	1.3	1.4	129	1,376	1,376
Bottled and canned soda	5.3	7.0	8.7	622	4,971	4,971
Misc. vending merchandise products	14.2	13.5	12.8	1.7	—	—
Total or average for above	99.0%	99.0%	99.0%	$11,669	$30,856	$30,829
Sales other than through vending machines	1.0	1.0	1.0			
Total sales	100.0%	100.0%	100.0%			

Source: NAMA

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Profit analysis for 1980

(based on reported sales volume categories)

	Less than $750,000	$750,000 to $1,999,999	$2,000,000 to $9,999,999	$10,000,000 or More
Sales at retail	100.0%	100.0%	100.0%	100.0%
Cost of sales	51.1	50.1	49.4	44.7
Total operating expenses	45.6	47.9	47.0	53.4
Operating profit	3.3%	2.0%	3.6%	1.9%
Les interest expenses	1.7	1.0	1.1	.4
Other income or charges (net)	1.9	1.2	.6	1.8
Profit before income taxes	3.5%	2.2%	3.1%	3.3%

Source: NAMA

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Vended cup cold drinks

	1970	1978	1979	1980
Total dollar volume	$ 378,623,000	$ 760,000,000	$ 892,000,000	$ 980,000,000
Total unit volume	3,272,615,000	3,907,000,000	4,113,000,000	4,115,000,000
Weekly unit volume	325	345	360	360
Machines on location	209,783	217,800	219,700	219,600
Vended prices/sales share				
15¢		39%	9%	3%
20¢		42%	54%	38%
25¢		15%	32%	46%
30¢		4%	4%	9%
Over 30¢		—	1%	4%
Diet drink share				
(% of operators using)		78%	88%	90%
(% of cup cold drink sales)		7%	9%	11%

Non-national brand flavors: 1980

23% of cup drink operators offer non-national brands flavors
6% of total cup drink volume is from non-national brand sales

Source: Vending Times

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Vended can cold drinks

	1970	1978	1979	1980
Total dollar volume	$ 420,226,000	$1,690,000,000	$2,441,000,000	$2,742,000,000
Total unit volume	2,401,290,000	6,290,000,000	6,975,000,000	7,140,000,000
Weekly unit volume	175	180	185	183
Machines on location	263,878	672,000	725,000	750,000
Vended prices/sales share				
25¢		20%	4%	1%
30¢		62%	5%	2%
35¢		15%	65%	44%
40¢		3%	22%	34%
Over 40¢		—	4%	19%
Diet drink share				
(% of operators using)		89%	85%	85%
(% of canned cold drink sales)		9%	11%	13%

Source: Vending Times

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Vended bottle cold drinks

	1970	1978	1979	1980
Total dollar volume	$ 697,029,000	$1,075,000,000	$1,193,000,000	$1,225,000,000
Total unit volume	5,163,176,000	4,250,000,000	4,553,000,000	4,435,000,000
Weekly unit volume	130	100	107	104
Machines on location	827,432	817,300	814,300	829,000
Vended prices/sales share				
20¢		11%	10%	6%
25¢		72%	70%	62%
30¢ and over		17%	20%	32%
Diet drink share				
(% of operators using)		27%	31%	33%

Source: Vending Times

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Operating expense

(as a percentage of sales)

	1980	1979
Salaries, commissions to servicemen	11.5%	10.6%
Machine maintenance — labor costs	2.7	2.8
All other salaries, wages, etc.	10.2	9.8
Total payroll*	24.4%	23.2%
Maintenance cost of vending machines	1.2	1.2
Location rental payments (commissions)	7.1	7.6
Depreciation or rental for vending machines	4.0	4.0
Other depreciation (except building)	1.4	1.1
Truck and automobile expense	2.0	1.7
Sales tax	2.9	2.9
Taxes, other than sales, federal and state income taxes	.5	.5
Insurance, all types	.5	.5
Building and garage rental or expense	.7	.7
Corporate overhead expense	1.9	2.2
All other expenses	5.8	4.5
Total operations expenses	52.4%	50.1%

*Includes fringe benefits and payroll taxes
Source: NAMA

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Vended hot drinks

	1970	1978	1979	1980
Total dollar volume	$ 451,795,000	$1,023,000,000	$1,059,000,000	$1,142,000,000
Total unit volume	3,945,804,000	4,920,000,000	4,926,000,000	4,820,000,000
Weekly unit volume	322	355	352	344
Machines on location	245,081	266,400	269,100	264,500
Product share of unit sales				
coffee		78%	71%	70%
hot chocolate		14%	22%	22%
Soup		3%	3%	3%
Tea		2%	2%	2%
Decaffeinated coffee		3%	2%	3%
Vended prices/sales share				
15¢		8.3%	9.7%	4%
20¢		73.2%	61.3%	54%
25¢		12.5%	25.9%	34%
Over 25¢		6.0%	3.1%	8%
Type of coffee (% of total volume)				
Fresh brew		63%	64%	62%
Instant		5%	2%	1%
Freeze-dried		35%	34%	34%
Decaffeinated coffee		1.5%	2%	3%
Other products (% of operators using)				
Hot chocolate		93%	97%	96%
Soup		69%	83%	81%
Tea		62%	75%	73%
Decaffeinated coffee		43%	51%	54%

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April 23, 1982

Liquor industry growth nearly flat for 1981

Consumer movement away from alcoholic drinks, higher prices in a poor economy and lack of overall industry promotions of its brands led to another year of relatively flat growth in the liquor industry.

Year end figures showed an increase of .4%, according to John C. Maxwell, BI's director of market research and statistics. The only real growth during the year was in white goods and the brandy-liqueur-cordial group with nonwhiskey volume up some 3%. The whiskey area was off almost 2.5%. (U.S. bottled Canadian was the exception here, up 2.5%.)

Vodka—the single largest category in the white goods area—had some growth problems with '81 estimated volume of 31.8 million cases, up 2.1%. Rum, one of the fastest growers in recent years, showed a comeback from its '80 decline of 3.2% and had total volume of 12.5 million cases, up 10.3%.

According to Maxwell, the slower growth rate of vodka indicates that some consumers are turning away from this alcoholic beverage to white wines, the fastest growing segment in the wine industry.

Tequila, although a small portion of the nonwhiskey market, with 2.9 million cases was up 7.8%. Prepared cocktails declined, down 7.5% to 3.6 million cases.

Brandy sales continued to set healthy growth rates and contradict the perceived move to lighter drinks. Sales of 7.1 million cases were up 6.8% in '81. Liqueurs and cordials are selling at a 14 million case clip and were up 3.4%.

top 10 brands

Three of the top five brands had volume declines, but retained their position in sales. However only about 550,000 cases separate number five, Jim Beam, from fast-growing Jack Daniels.

Jack Daniels, a product of Brown-Forman, has bucked the trend in brown goods. Sales of 3.1

Apparent consumption of distilled spirits by class and type

	1979	1980	Change	1981E	Change
Bond	1.06	1.01	(4.7)%	0.90	(10.9)%
Straight	22.63	22.18	(2.0)	21.60	(2.6)
Total bourbon	**23.69**	**23.19**	**(2.1)**	**22.50**	**(3.0)**
Blended	15.58	14.79	(5.1)	13.80	(6.7)
100% Light	0.22	0.23	4.5	0.20	(13.0)
Total domestic whiskey	**39.48**	**38.21**	**(3.2)**	**36.50**	**(4.5)**
U.S.-Bottled Canadian	11.80	12.40	5.1	12.70	2.4
Foreign-Bottled Canadian	8.32	8.73	4.9	8.70	(0.3)
Total Canadian	**20.12**	**21.13**	**5.0**	**21.40**	**1.3**
U.S.-Bottled scotch	7.76	7.88	1.5	7.80	(1.0)
Foreign-Bottled scotch	14.70	13.22	(10.1)	12.70	(3.9)
Total scotch	**22.46**	**21.10**	**(6.1)**	**20.50**	**(2.8)**
Irish	0.29	0.27	(6.9)	0.28	3.7
Total imported whiskey	**42.91**	**42.50**	**(1.0)**	**42.18**	**(0.8)**
Total all whiskey	**82.39**	**80.71**	**(2.0)**	**78.68**	**(2.5)**
Gin	15.44	15.51	0.5	15.60	0.6
Vodka	30.21	31.15	3.1	31.80	2.1
Rum	11.71	11.33	(3.2)	12.50	10.3
Brandy	6.54	6.65	1.7	7.10	6.8
Liqueurs/cordials	13.02	13.54	4.0	14.00	3.4
Tequila	2.48	2.69	8.5	2.90	7.8
Prepared cocktails	4.13	3.89	(5.8)	3.60	(7.5)
Total nonwhiskey	**83.64**	**84.76**	**1.3**	**87.50**	**3.2**
Grand total distilled spirits	**166.03**	**165.47**	**(0.3)%**	**166.18**	**0.4%**

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million cases in '81 is a 24% increase, by far the largest of any major brand. In 1972, the product had sales of only 700,000 cases.

Popov, Heublein's popular priced vodka, had a sales decline of 10.4% and dropped from number seven spot to number five. Canadian Mist, another Brown-Forman product, had a 6.6% sales hike to 2,581,000 cases and moved from number 13 to number 10.

Gordon's gin dropped from 2% and ended up in spot number 12 down from nine in 1980.

Bacardi rum is the number one product and with a 3.1% increase to 6.5 million cases increased its lead over Smirnoff vodka, number two.

Seagram's 7 Crown, down 2.6% is number three. Canadian Club had the sharpest decline (3.9%) of any product in the top five, but retained its number four position.

Other significant shifts in products with sales of over 1 million cases were: Kahlua, Walker's coffee-flavored liqueur, tied with Kamchatka in the number 25 spot in 1980, moved to 18 with a 3.9% gain. Kamchatka—although it had no increase in '81—moved into position number 20.

Heublein's Black Velvet, up slightly over 2%, made significant movement from 25 to 19.

Among new products and recent introductions, the following changes are significant: Stolichnaya, Pepsi's Russian vodka import moved from 310,000 cases to 450,000; Silhouette, Fleischmann's new vodka seems to be off to a good start, moving from an estimated 200,000 cases in '80 to 300,000 in '81; Beam 8 Star Blend, in its first year of marketing, had sales of 95,000 cases; in '81, its second year, it sold 245,000 cases. E&J Gallo's first years of marketing E&J brandy is also obviously a success. The product had '81 sales of 200,000 cases.

Bailey's Irish Cream Liqueur seems to be an unqualified suc-

Apparent consumption of distilled spirits

(Millions of wine gallons)

	1977	1978	Change	1979	Change	1980	Change	1981	Change
January	29.08	30.52	5.0%	32.03	4.9%	33.12	3.4%	32.84	(0.8)%
February	28.21	30.07	6.6	30.37	1.0	32.03	5.4R	30.88	(3.6)
March	36.61	38.16	4.2	37.43	(1.9)	34.58	(7.6)	35.67	3.2
April	33.27	33.79	1.6	34.46	2.0	35.43	2.8	37.03	4.5
May	32.59	34.19	4.9	35.50	3.8	34.60	(2.5)	34.42	(0.5)
June	38.44	38.59	0.4	36.96	(4.2)	37.28	0.9	37.72	1.2
July	31.00	31.89	2.9	32.43	1.7	36.35	12.1	35.91	(1.2)
August	33.16	35.67	7.6	36.04	1.0	34.00R	(5.7)R	33.36	(1.9)
September	34.21	34.06	(0.4)	33.55	(1.8)	34.68	3.4		
October	34.87	37.45	7.4	38.55	2.9	38.24	(0.8)		
November	43.63	44.20	1.3	44.25	0.1	42.53	(3.9)		
December	54.29	52.70	(2.9)	53.75	2.0	54.40	0.5		
Total†	**431.55**	**443.75**	**2.8%**	**447.52**	**0.8%**	**449.94R**	**0.5%R**		

12-Month Moving Total*

	1976-77	1977-78	Change	1978-79	Change	1979-80	Change	1980-81	Change
January	422.74	430.80	1.9%	442.80	2.8%	446.41	0.8%	446.95R	0.1%
February	422.85	432.66	2.3	443.10	2.4	448.06	1.1	445.80R	(0.5)R
March	423.78	434.21	2.5	442.37	1.9	445.21	0.6	446.89R	0.4R
April	424.03	434.73	2.5	443.04	1.9	446.18	0.7	448.49R	0.5R
May	423.90	436.33	2.9	444.35	1.8	445.28	0.2	448.31R	0.7R
June	425.89	436.48	2.5	442.72	1.4	445.60	0.7	448.75R	0.7R
July	423.84	437.37	3.2	443.26	1.3	449.52	1.4	448.31R	(0.3)R
August	425.20	439.88	3.5	443.63	0.8	447.48R	0.9R	447.67	—
September	426.16	439.73	3.2	443.12	0.8	448.61R	1.2R		
October	426.66	442.31	3.7	444.22	0.4	448.30R	0.9R		
November	428.48	442.88	3.4	444.27	0.3	446.58R	0.5R		
December	429.36	441.29	2.8%	445.32	0.9%	447.23R	0.4%R		

†Breakdown by months is not available for Hawaii, but is included in the total.
Annual data is: 1975 — 1.97
1976 — 2.02
1977 — 2.19
1978 — 2.45
1979 — 2.20
1980 — 2.70

*Excludes Hawaii
R = Revised

Source: Lehman Brothers Kuhn Loeb Research

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February 19, 1982

wine shipments also gained, up 9.7% to 24 million gallons.

Other categories showed declines from 1980 levels: shipments of appetizer and dessert wines, at 22.7 million gallons, dropped 10.9%, and vermouth and other special natural (flavored) wines registered 33.5 million gallons, off 6.8%.

Gallo still number one; wine shipments up 7%

E. & J. Gallo remained the number one winery in the U.S. last year by a wide margin. Impact Databank statistics show Gallo shipped 131.4 million gallons in 1981, 7.5% above 1980.

Total U.S. wine shipments in 1981 are estimated at 509.1 million gallons. The 10 largest domestic wineries accounted for 333.7 million gallons. Total shipments rose 7.0% in 1981 over '80. Shipments from the top 10 were up 4.0%.

Ranked number four, The Wine Spectrum (Coca-Cola) posted the largest year-to-year shipments increase of the top 10. It sold 27.4 million gallons, up 24.0% from 1980. Most of that growth, according to Impact, came from shipments of the Taylor California Cellars line. These brands sold 6.9 million cases of 2.4 gallons each in 1981, almost twice the 1980 level.

Heublein's United Vintners, ranked number two, sold 50.3 million gallons last year, off 4.0% from the previous year. Almaden (National Distillers) also was off last year, for the first time in its history. Almaden, number three, sold 30.4 million gallons in 1981, dropping 5.3% from '80. Impact suggests that Almaden is feeling intense competition from Gallo, Taylor California Cellars, Inglenook and Paul Masson. Almaden's price increase, effective Jan. 1, 1981, "may have revealed that the brand is especially price sensitive," suggested Impact.

Shipments of number 10 Sebastiani, were down 14.4% from 1980 to '81, to 8.6 million gallons. Impact says, "the company is in the process of settling into its enormous growth of the last five years and (is) redefining its goals" Between 1975 and '81, Sebastiani had the strongest annual compound growth rate of all top 10 wineries, 23.8%.

Impact believes that the continued growth of Gallo and The Wine Spectrum will make competition tougher for the other top 10 wineries. "The other eight might find themselves fighting more fiercely for a smaller slice of the pie."

Exports of U.S. Produced Wine in 1980 and 1981

Country	Gallons 1981	1980	Percent Change
Canada	5,547,507	4,612,792	+ 20.3
United Kingdom	1,107,314	530,963	+ 108.5
Colombia	402,241	51,708	+ 667.9
Belgium & Luxemburg	345,878	225,509	+ 53.4
W. Germany	337,308	178,516	+ 89.0
Bahamas	269,446	339,718	- 20.7
Japan	243,517	207,316	+ 17.5
N. Antilles	205,530	216,198	- 4.9
L.W. & W.W. Islands	193,386	142,718	+ 35.5
France	144,200	52,467	+ 174.8
Mexico	134,203	57,240	+ 135.7
Netherlands	123,606	82,077	+ 50.6
Switzerland	118,911	28,152	+ 322.4
Bermuda	114,317	150,510	- 24.0
Panama	104,354	97,821	+ 6.7
Ireland	90,750	65,917	+ 37.7
Venezuela	89,003	20,799	+ 327.9
Hong Kong	88,839	69,953	+ 27.0
Trinidad	76,548	113,060	- 32.3
Singapore	75,414	33,651	+ 124.1
Denmark	70,113	26,898	+ 160.7
South Africa	69,581	0	—
Sweden	69,284	8,874	+ 680.8
Philippines	62,846	59,796	+ 5.1
Peru	56,597	8,794	+ 543.6
Ecuador	49,670	55,473	- 10.5
Barbados	43,474	39,995	+ 8.7
Dominican Rep.	37,790	13,229	+ 185.7
Indonesia	35,050	23,730	+ 47.7
Nigeria	33,922	23,270	+ 45.8
Haiti	33,195	26,871	+ 23.5
Cayman Islands	32,278	39,076	- 17.4
Liberia	31,900	2,824	+ 1,029.6
Iceland	31,021	18,682	+ 66.0
Total	10,469,693	7,624,597	+ 37.3
Other Countries	253,854	244,417	+ 3.9
All Countries	10,723,547	7,869,014	+ 36.3

Does not include shipments to Puerto Rico and U.S. possessions, shipments abroad to U.S. Armed Forces, and shipments for use of vessels and airplanes engaged in foreign trade.

Sources: Prepared by Wine Institute from reports of Bureau of the Census, U.S. Department of Commerce.

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Domestic volume comparisons of brands selling over 1 million cases

Rank 1980	Rank 1981	Brand	Company	3-Gallon Cases (000) 1980	1981E	Change
1	1	Bacardi	Bacardi	6,319	6,515	3.1%
2	2	Smirnoff	Heublein	5,873	5,810	(1.1)
3	3	7 Crown	Seagram	5,080	4,950	(2.6)
4	4	Canadian Club	Walker (GWL)	3,850	3,700	(3.9)
5	5	Jim Beam	James Beam (AB)	3,500	3,680	5.1
10	6	Jack Daniel's	Brown-Forman	2,519	3,123	24.0
6	7	V.O.	Seagram	3,065	3,000	(2.1)
8	8	Windsor Supreme	National	2,785	2,785	—
7	9	Popov	Heublein	3,002	2,691	(10.4)
13	10	Canadian Mist	Brown-Forman	2,421	2,581	6.6
11	11	Seagram's Gin	Seagram	2,520	2,550	1.2
9	12	Gordon's Gin	Gordon/Renfield	2,550	2,500	(2.0)
12	13	J&B Rare	Paddington (PC)	2,500	2,350	(6.0)
14	14	Dewar's	Schenley (RA)	2,115	2,200	4.0
16	15	Gilbey's Gin	National	2,145	2,145	—
15	16	Cutty Sark	Buckingham	1,850	1,700	(8.1)
18	17	Gordon's Vodka	Gordon/Renfield	1,670	1,690	1.2
25	18	Kahlua	Walker (GWL)	1,500	1,640	3.9
26	19	Black Velvet	Heublein	1,594	1,628	2.1
22	20	Gilbey's Vodka	National	1,535	1,600	4.2
25	20	Kamchatka	National	1,600	1,600	—
19	21	Johnnie Walker Red	Somerset (NS)	1,620	1,570	(3.1)
17	22	Ancient Age	Schenley (RA)	1,750	1,550	(8.9)
23	23	Christian Brothers	Fromm & Sichel	1,525	1,525	—
24	24	Beefeater	Kobrand	1,510	1,510	—
21	25	Ten High	Walker (GWL)	1,550	1,500	(3.2)
20	26	Early Times	Brown-Forman	1,546	1,477	(4.5)
27	27	Kessler	Calvert (S)	1,400	1,400	—
28	28	Walker Brandy	Walker (GWL)	1,300	1,350	3.8
31	29	Tanqueray	Somerset (NS)	1,070	1,100	2.8
29	29	Calvert Extra	Calvert (S)	1,160	1,100	(5.2)
33	30	Old Crow	National	970	1,020	5.2
32	31	Southern Comfort	Brown-Forman	1,047	1,017	(2.9)
30	32	Imperial	Walker (GWL)	1,100	1,000	(9.1)
34	33	Wolfschmidt	Seagram	955	1,000	4.7

Key to parent corporations:

(AB)	American Brands	(GWL)	Gooderham & Worts Ltd	(RA)	Rapid-American
(G)	Glenmore	(NS)	Norton Simon	(S)	Seagram
		(PC)	Paddington/Carillon	(NB)	Nabisco Brands

Source: Lehman Brothers Kuhn Loeb Research

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February 19, 1982

cess. 1981 sales of 625,000 cases is roughly 2.5 times its '80 sales of 250,000 cases.

Also in the import area, Brown-Forman's Martell cognac continues to grow at a healthy pace. The product moved from 108,000 cases to 139,000 in '81.

Maxwell points out that among distillers Brown-Forman is unique. Its Jack Daniels is rapidly gaining in the bourbon area and is only some 550,000 cases under the leader, Jim Beam. From '79 to '80, Jack Daniels increased sales by 478,000 cases; from '80 to '81 the sales gain was 514,000 cases. Beam has also been growing, but at a slower rate.

James Beam is also in a unique position. None of the firm's products lost sales in 1981.

Maxwell feels the lack of promotional pricing will continue to plague industry growth. "Increasingly, companies tell us that they are using their liquor divisions as 'cash cows' since they consider the industry somewhat mature. They feel that its cash flow could probably be used better elsewhere," he comments.

Therefore, he predicts, the industry will continue to prune brands, may lower or cease advertising on brands that show little or no long-term promise, and will be aggressive on pricing.

On the "good news front," Maxwell predicts that federal excise taxes will not be increased in the next 12 months. Liquor is already the most overtaxed product in the United States with federal taxes amounting to $10.50 per gallon. However, he warns, states may move to increase taxes soon.

US wine exports up 36.3% in '81

Exports of wine produced in the U.S., over 90% of which comes from California, jumped to a record 10.7 million gallons in 1981, a gain of 36.3% over 1980, according to the Wine Institute.

Several countries reached significant milestones in 1981. Canada, for many years the largest export market for American wine, maintained that position by importing more than 5.5 million gallons in 1981, an increase of 20.3% over the previous year. England posted a 108.5% gain, to 1.1 million gallons; its third consecutive year of triple-digit percentage increase.

Colombia, ranked 20th in 1980 in imports of American wine, jumped to third place in 1981 with a total of 402,000 gallons, a 66.8% increase. Belgium and Luxemburg imported 346,000 gallons, a 53.4% increase, while W. Germany imported 337,000 gallons, for an 89% increase.

Shipments of California wine to domestic and worldwide markets last year totaled a record 357.9 million gallons, an increase of 5.7% over 1980.

The largest increase came in table wine: 277.7 million gallons were shipped, 8.8% over 1980. Sparkling